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Alaska Department of Fish and Game
Division of Commercial Fisheries
333 Raspberry Road
Anchorage, Alaska 99518

May 2005

Subsistence and Personal Use Salmon Harvests in the Alaska Portion of the Yukon River Drainage, 2003

by

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**SUBSISTENCE AND PERSONAL USE
SALMON HARVESTS IN THE ALASKA
PORTION OF THE YUKON RIVER DRAINAGE, 2003**

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and

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Regional Information Report¹ No. 3A04-33

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ABSTRACT

Successful management of Yukon Area fishery resources depends upon accurate estimates of salmon harvest from the river's fisheries. This report documents the subsistence and personal use harvests within the Yukon Area.

The majority of communities within the Yukon Area have no regulatory requirements to report their subsistence salmon harvest. To estimate the subsistence salmon harvest from these communities, the Alaska Department of Fish and Game has implemented a voluntary survey program. The 2003 program included postseason household interviews, follow-up telephone interviews and postal questionnaires, and subsistence harvest calendars. Stratified random sampling techniques were used to select Yukon Area households to be interviewed. Surveyors contacted 920 households in the surveyed communities in 2003 (81% of the total selected to be surveyed). Information provided by these surveyed households was expanded to estimate the harvest of households that were not surveyed.

In some portions of the Yukon Area, fishermen are required to obtain an annual subsistence or personal use household permit prior to salmon fishing. In designated permit areas, fishermen are required to document their harvest on the permit and return the permit at the end of the fishing season. A total of 514 subsistence and personal use permits were issued in 2003, and 469 permits (91 percent) were returned at the time of this report. Of the total number of returned permits, 284 permits reported a harvest. This report also documents the number of fish given to households for subsistence use from Yukon Area test fish projects.

The total estimated subsistence and personal use harvest throughout the Yukon Area, including the Coastal District communities, was 57,163 Chinook, 82,420 summer chum, 57,324 fall chum, 24,421 coho salmon and 114,181 other fish (pink salmon, whitefish, sheefish and northern pike). The estimated Yukon Area subsistence salmon harvest, excluding the Coastal District communities and personal use harvest in the Fairbanks Nonsubsistence Area, was 55,109 Chinook, 68,304 summer chum, 56,784 fall chum and 23,580 coho salmon.

The most common fishing gear types used throughout the Yukon Area were set gillnets (59%) followed by drift gillnets (28%), fish wheels (8%), and other gear (5%). Salmon were harvested throughout the Yukon Area, with the largest harvests occurring in District 5 for Chinook and fall chum salmon, District 1 for summer chum salmon, and District 6 for coho salmon. Approximately 284 households reported feeding an estimated 67,300 salmon to 6,005 dogs. The number of fish provided to households for subsistence use from Yukon Area test fish projects included 1,253 Chinook, 3,866 summer chum, 3,728 fall chum, and 1,391 coho salmon. A total of 3,790 salmon were reported lost for human consumption due to sick fish, weather/spoilage, predation, or other unknown circumstances.

KEY WORDS: Amount Necessary for Subsistence (ANS), Chinook, chum, coho, harvest, northern pike, personal use, salmon, sheefish, subsistence, Tanana River, whitefish, Yukon River

INTRODUCTION

The Yukon Area includes all waters of Alaska within the Yukon River drainage and all coastal waters of Alaska from Point Romanof southward to the Naskonat Peninsula (Figure 1). For management purposes, the Yukon Area is divided into seven districts and ten subdistricts. The Lower Yukon Area consists of coastal waters in the Yukon Area and the Yukon River drainage from its mouth upstream to Old Paradise Village, and is composed of Districts 1, 2, and 3. The Upper Yukon Area consists of the Yukon River drainage upstream of Old Paradise Village to the Canadian border and is divided into Districts 4, 5, and 6. The Coastal District includes the remainder of coastal Yukon Area waters not included in District 1.

Five species of Pacific salmon are found in the Yukon River drainage: Chinook *Oncorhynchus tshawytscha*, chum *O. keta*, coho *O. kitsutch*, pink *O. gorbusch*, and sockeye *O. nerka* salmon. The majority of subsistence and personal use harvests are made up of Chinook, chum, and coho salmon. The chum salmon return consists of two temporally and genetically distinct stocks: early (summer chum) and late (fall chum). Chinook salmon are valued as the primary salmon species for human consumption, and harvest levels in the Upper and Lower Yukon Areas are similar.

Salmon have traditionally been harvested on the Yukon River for subsistence use prior to the influence of western cultures. In addition to human consumption, salmon are fed to dogs, which are used for recreation, transportation and as haul animals. Today the practice of keeping sled dogs is more common in the Upper Yukon Area than in the Lower Yukon Area. A gradual reduction in the need for salmon as dog food began around 1930, when the airplane began replacing the sled dog as a primary mail and supply carrier. This decline accelerated in the 1960's with the introduction of snow machines to Interior Alaska (Andersen 1992). Beginning in the early 1980's, there was a renewed interest in the recreational use and racing of sled dogs, thereby increasing the number of subsistence salmon harvested for dog food.

Since 1961, the Alaska Department of Fish and Game ("department") has collected information on subsistence salmon harvest and use in the Yukon Area. Commercial fishing in the Upper Yukon River began in 1974 (ADF&G 2001). From 1974 through 1977, the sale of roe from subsistence caught salmon was legal. Subsistence harvested salmon or their eggs can no longer be legally bought or sold under the State of Alaska regulations. Commercially harvested salmon, however, may be retained for subsistence use.

Many communities are located throughout the Yukon River drainage. The residents in these rural communities are primarily of Yupik Eskimo and Athabaskan Indian descent. The 2000 census indicated that the rural (Non-Fairbanks North Star Borough) resident population of the Yukon Area was approximately 13,600 people (U.S. Census Bureau 2001). This was a five percent decline in the total rural Yukon Area population from the 1990 census estimate of 14,300 residents.

Yukon Area subsistence and personal use fishermen mainly use drift gillnets, set gillnets, and fish wheels to harvest salmon. Set gillnets are utilized throughout the Yukon Area, whereas drift gillnets are only allowed from the mouth of the Yukon River to 18 miles below the community of Galena. Although fish wheels are a legal gear type for subsistence fishing throughout the

drainage, they are essentially used only in the Upper Yukon Area, where water conditions and fishing locations are more suitable for fish wheels and ample supplies of wood timbers are available for construction.

Subsistence salmon fishing activities in the Yukon Area typically begin in late May and continue through early October. Salmon fishing in May and October is highly dependent upon river ice conditions. Fishing activities are usually based from a fish camp or a home village. Extended family groups, representing two or more households, often work together to harvest, cut, and preserve salmon for subsistence use. Some households from communities not located along the mainstem Yukon River, such as Shageluk, operate fish camps along the mainstem Yukon River.

Although most subsistence and personal use salmon harvested in the Yukon Area originate from Yukon River drainage stocks, communities within the Coastal District may harvest stocks bound for other areas. A salmon mark-recapture study, conducted in marine waters near Hooper Bay in 1986, documented the presence of Norton and Kotzebue Sound chum salmon stocks in the area (Kerkvliet 1986). This study, however, also showed that 89% of the recovered tagged summer chum salmon were of Yukon River origin.

Most of the Chinook salmon harvested for subsistence use are dried, smoked or frozen for later human consumption. However, small Chinook ("jacks"), summer chum, fall chum and coho salmon are primarily harvested to feed dogs in the Upper Yukon Area (Andersen 1992). Most subsistence salmon used for dog food are dried (summer chum salmon) or "cribbed" (frozen in the open air) in the case of fall chum and coho salmon. In the Lower Yukon Area, dogs are often fed scraps that become available during the processing of freshly harvested salmon; relatively few whole fresh salmon are fed to dogs.

During a commercial fishing season, many Yukon Area residents participate in both commercial and subsistence harvest activities. Restrictions on subsistence salmon fishing may be required during a commercial salmon fishing season to assist in the enforcement of commercial fishing regulations. However, during a typical salmon fishing season, substantially more time is allowed for subsistence fishing than for commercial fishing. State regulations dictate that subsistence is the highest priority use of salmon, and subsistence is a primary consideration in fishery management actions. State subsistence regulations have changed substantially in recent years due in part to declining run strength (Appendix C).

Documentation of the 2003 Yukon Area subsistence and personal use salmon and non-salmon harvest is essential to effectively manage the fishery. Most subsistence users along the Yukon River drainage are not required to record or report their harvest on permits; therefore the annual survey is the department's method of estimating this subsistence harvest and use.

METHODS

Postseason Subsistence Surveys

The 2003 subsistence survey program was designed to provide an estimate of the salmon harvested by subsistence fishing households along the Alaskan portion of the Yukon River

drainage. Primary components of the survey program were postseason interviews and follow-up telephone or postal surveys.

The first step in the interview program is to identify Yukon Area households and to select which households will be surveyed. To this end, a database of Yukon Area households (*families* database) is maintained and updated by using previous years' survey information and information collected from other sources. Knowledgeable individuals in each community are typically contacted to review the department's household list. To help keep the list current, the department uses various village census lists, telephone and utility lists, and the Alaska Permanent Fund Dividend application list..

The *families* database forms the framework for the stratified random sampling program. Each household in the database is assigned to a subsistence harvest category (strata). These strata are identified by the following average harvest categories: *Unknown*, *Do Not Fish*, *Light*, *Medium*, or *Heavy*. In 2003, households with historical harvest information were placed in a harvest category based upon their average annual harvest of salmon from the two most recent years in the time period 1997 to 2002. The years of 1998 and 2000 were excluded as a basis for reclassification of households harvest categories because of low returns of salmon and subsequent lower harvests, and because of subsistence restrictions implemented during the fall season. If household harvest information was not available for two recent years, then the household harvest category was left unchanged. In the Yukon Area, an average harvest of 1 to 100 salmon is considered *Light*, a harvest of 101 to 500 salmon is considered *Medium*, and a harvest greater than 500 salmon is considered *Heavy*.

The 2003 season marked the first year that the harvest levels for the Lower and Upper Yukon Areas harvest strata were the same. Prior to 2003, in the Lower Yukon Area an average harvest of 1 to 200 salmon was considered *Light*, a harvest of 201 to 500 salmon was considered *Medium*, and a harvest greater than 500 salmon was considered *Heavy*. In the Upper Yukon Area, an average harvest of 1 to 100 salmon was considered *Light*, a harvest of 101 to 700 salmon was considered *Medium*, and a harvest greater than 700 salmon was considered *Heavy*. In 2003, the harvest strata were revised to reflect recent changes in the fishery.

Next, a stratified random sample (Cochran 1977) of households is drawn from the stratified population. In general, strata sample sizes are based upon the level of harvest. In 2003, 100% of the households in the *Unknown*, *Medium* and *Heavy* harvest categories and 30% of the households in the *Light* and *Do Not Fish* harvest categories were selected to be sampled during the survey. If any stratum sample size obtained using these guidelines contained five or fewer households, then the sample size was made equal to the stratum size. All households were sampled in communities with 40 or fewer households. The percentage of households sampled was increased to 50% for the *Light* harvest category in Emmonak, Holy Cross, Pilot Station and Tanana to improve the precision of the harvest estimate in these larger communities.

In 2003, surveyors traveled to 34 Yukon Area communities between September 6 and November 4 to conduct postseason interviews. Before conducting interviews, surveyors were trained in surveying technique and given suggestions on how to get the best information possible from people who may not know the exact number of fish they harvested or who are not used to

quantifying their fish harvest. In addition, the surveyors were trained in salmon species identification, as local names for salmon vary throughout the drainage. For example, fishers in many portions of the Yukon Area use the term "dog salmon" to refer to summer chum and "silvers" to refer to fall chum salmon. Surveyors have a responsibility to attempt to contact all the selected households, ask questions consistently and understandably, and foster a cooperative atmosphere.

Interview questions were designed to provide a quantitative and qualitative assessment of each household's subsistence salmon harvest (Figure 2). Household members were asked their total salmon harvest and use (by species) for the season, the fishing gear used, and areas fished. To determine distribution of fish within a village, households were asked how many families had fished together and how much of the group's catch went to the selected household. Households were also asked whether the household had either given salmon to other families or whether they had received salmon from other households or from the various test fisheries projects. Households were asked how many salmon were harvested for dog food. The question regarding subsistence needs being met was altered slightly to "estimate percent success by species of the household's subsistence needs met." This change was to better assess effort and success for individual fish species. Not all subsistence users fish for all species, or they may be very successful fishing for one species and not for another species. A new question in the 2003 survey asked households to estimate the number of salmon by species that were "lost." Fish lost included salmon that were not used for human consumption due to spoilage, predators, weather, sick fish, and other circumstances. In many cases, fish not suitable for human consumption were fed to dogs. A separate question on the 2002 survey regarding whether or not the household *attempted* to fish for coho salmon with hook and line or dip net was modified in 2003. The dip net gear had been allowed for the first time in 2002 to provide fishers, during times of conservation measures to protect one salmon species in a mixed stock fishery, with an alternative gear type to harvest the other salmon and non-salmon species. In 2002, no one reported using a dipnet, so in 2003 this separate question was eliminated, and dipnets were simply included with the salmon fishing gear question. After the interview was completed survey participants were given a small token of appreciation (a thermometer zipper pull) for participating in the survey.

The survey questions concentrated on Chinook, summer chum, fall chum, and coho salmon, but households were also asked about their harvest of pink salmon and miscellaneous non-salmon species. Reported harvests of whitefish *Coregonus spp.*, northern pike *Esox lucius*, and sheefish *Stenodus leucichthys* were expanded to obtain estimates of total harvests for surveyed communities. The reported harvests of other non-salmon species were not expanded. This is because the harvest level strata are not based on non-salmon species and only represent a minimum harvest (Borba and Hamner 1998).

Yukon Area households were stratified according to household salmon harvests and not based on household use. However, an estimate of total salmon use was also generated. Estimated "use" includes salmon harvested and used by that household as well as fish received from other households or test fisheries projects.

Follow-up telephone interviews were attempted for any selected households who were unavailable and not contacted by surveyors while in the community. Contact was attempted with

these households on at least three different days and three different times of day. If the surveyor was still unable to contact a knowledgeable individual in the household, a survey questionnaire, including a postage-paid return envelope, was mailed to the household.

Calendars

In 2003, the department distributed subsistence harvest calendars via two mass mailings to 1,260 Lower Yukon and 1,100 Upper Yukon Area households that were identified based on the post-2002 Yukon Area subsistence survey updated database. These mass mailings were a return to the old method of sending calendars to all identified Yukon River households. In 2002, a more selective strategy had been tried, with calendars mailed only to those households who had returned a calendar at least once in the last ten years (Brase and Hamner 2003). The 2002 change was made because of very low response rates in previous years, as well as the cost of the mass mailings. The 2003 return to mass mailing calendars was due in part to the numerous requests by fishers for calendars after not receiving one in 2002, and because the budget allowed for additional calendars.

The calendars provide space for fishermen to record their daily salmon harvest by species. Harvest information from calendars returned before or during the subsistence survey is used to reduce the need for recall during postseason surveys. Calendars may also be used as the primary source of harvest data when contact is not made with a household selected to be surveyed. Additionally, calendars provide data for assigning households to the various harvest strata in the *families* database. This is particularly crucial for households that are not selected for interviews in a given year. When using calendar harvest information, however, one must not assume that all harvest is from just one household. Commonly, calendars include harvest from multiple households that fish together. Every effort is made to contact the head of household to verify harvest information when using the calendars.

To increase the number of calendars returned during village surveys, posters were sent to village post offices to remind fishermen to have their harvest calendars available for the surveyors. Additionally, survey schedules were broadcast over local radio stations before the surveyors' arrival. Also, the surveyors' schedule was announced during two weekly Yukon River Drainage Fisheries Association (YRDFA) teleconferences in early September. Everyone who returned a properly filled out calendar became eligible for one of two \$100 lottery prizes.

Permits

Where the Yukon River drainage is accessible by the Alaska highway road system, households must obtain subsistence or personal use fishing permits. Permits are issued for a portion of District 5 and all of District 6 (Tanana River). Permits are issued from department area offices in Fairbanks, Delta Junction, and Tok. In addition, permit applications for the current season are mailed to all users who returned their permits from the previous season. Subsistence permit applications sent outside Fairbanks include a letter explaining how to apply by mail, a postage paid return envelope, and a schedule of when a department representative will visit their

community. In 2003, permit issuing trips were conducted in the communities of Central, Circle, Delta Junction, Dot Lake, Eagle, Manley, Minto, Nenana, Northway, Tanacross, and Tok.

Permit holders are required to keep a record of their daily fish harvest on the permit and return the permit to the department within ten days of the expiration date. Households with expired permits who do not report their harvest are mailed reminder letters. If necessary, two reminder letters are sent, generally two weeks apart. Telephone contact is attempted with households that do not respond to the reminder letters. Harvests are tabulated postseason for all permit holders who returned their permit, returned a completed reminder letter, or verbally reported their harvest information. These results are not expanded for users who do not return their permits.

Statistical Methods

In the postseason survey, classical stratified random sampling methods (Cochran 1977) are used to estimate the average and total number of fish caught by each of the five use groups in each surveyed Yukon Area community.

Denote that

N_{kj} = number of households in j th ($j = 1 \dots 5$) user group of the k th community

n_{kj} = number of sample households in the j th user group of the k th community

y_{kji} = response of i th sample household ($i = 1 \dots n_{kj}$) in the j th user group of the k th community

Mean response of the j th user group of the k th community (\bar{y}_{kj}) is

$$\bar{y}_{kj} = \frac{\sum_{i=1}^{n_{kj}} y_{kji}}{n_{kj}}$$

and its standard error (SE_{kj}) is

$$SE_{kj} = \sqrt{\frac{s_{kj}^2}{n_{kj}} \left(\frac{N_{kj} - n_{kj}}{N_{kj}} \right)} \text{ where } s_{kj}^2 = \frac{\sum_{i=1}^{n_{kj}} (y_{kji} - \bar{y}_{kj})^2}{n_{kj} - 1}$$

The estimate of total responses of the k th community (\hat{T}_k) is

$$\hat{T}_k = \sum_{j=1}^5 N_{kj} \bar{y}_{kj}$$

and its 95% confidence interval (95%CI_k) is

$$95\%CI_k = 1.96 \cdot \sqrt{\hat{V}(T_k)} \text{ where } \hat{V}(T_k) = \sum_{j=1}^5 N_{kj}^2 \left(\frac{N_{kj} - n_{kj}}{N_{kj}} \right) \left(\frac{s_{kj}^2}{n_{kj}} \right)$$

Because the estimates of the responses in each community are independent from each other, the estimate of survey wide total (\hat{T}) is

$$\hat{T} = \sum_{k=1} \hat{T}_k$$

and its 95% confidence interval (95%CI) is

$$95\%CI = 1.96 \cdot \sqrt{\hat{V}(T)} \text{ where } \hat{V}(T) = \sum_{k=1} \hat{V}(T_k)$$

RESULTS

Overall Estimation of Harvest

Based on the 2003 postseason survey, returned permits (subsistence and personal use), and salmon made available from test fish projects, 57,163 Chinook, 82,420 summer chum, 57,324 fall chum and 24,421 coho salmon were estimated to have been harvested for subsistence and personal use throughout the Yukon Area (Table 1). These numbers were extrapolated from 920 surveyed households, or 81% of the total selected (Table 6), plus 469 returned permits, or 91% of the total issued (Table 3). The most common gear types used for subsistence and personal use salmon fishing throughout the Yukon Area were set gillnets (59%) followed by drift gillnets (28%), fish wheels (8%), and other gear (5%) (Table 1). Although only representing 18% of fishing households, District 5 harvested the most Chinook and fall chum salmon, 34% and 49% respectively (Table 1).

Approximately 181 surveyed households and 104 permitted households reported feeding subsistence caught salmon to dogs (Tables 2 – 3). An estimated 67,261 salmon were retained for dog food (from both surveyed and permitted households) throughout the Yukon Area (Tables 3 – 4). In the surveyed communities, all salmon caught in the 2003 commercial season were sold for flesh and no commercially-caught salmon were reported retained for dog food (Table 5). However, during the directed commercial fisheries in the permit community of Nenana and the Fairbanks Area in District 6, an estimated 14,000 female fall chum and coho salmon were harvested and sold for the roe, but the flesh was not marketable due to low value. The carcasses of these salmon were returned to fishers for subsistence use or given away, generally for use as dogfood. To avoid double counting of salmon, efforts were made not to include this commercial harvest, previously documented on fish tickets, with the subsistence harvest reported on Table 1. Even with efforts to avoid double counting salmon, an unknown commercial harvest may still be represented in the reported subsistence permit information for the community of Nenana. Throughout the survey communities, commercial fishers retained a total of 163 Chinook, 618 summer chum, 38 fall chum, and 33 coho salmon for subsistence use. These numbers are included in the Yukon Area subsistence harvest totals (Table 1). These commercially-caught salmon were kept for human consumption, usually just as “eating fish” for that night’s dinner.

A total of 3,790 salmon were reported lost for human consumption in the surveyed communities (Appendix A.12). These losses were due to sick fish (51%), predation (16%), weather-related causes (14%), and unknown (19%). Sick fish, primarily identified by surveyed households as *Ichthyophonus hoferi*, was the reason given for the majority of lost Chinook (68%) and fall chum salmon (95%). Summer chum salmon losses were evenly distributed between sick fish (22%), weather/spoilage (24%), predation (24%), and unknown (30%). Coho and pink salmon losses were primarily due to predation, at 65% and 69%, respectively.

Postseason Subsistence Surveys

In 2003, 1,133 households were selected to be surveyed (Table 6). Surveyors attempted to interview a member of each selected household, preferably the primary harvester. Postseason interviews were conducted with 920 households (81% of total selected) (Table 6). This number includes follow-up telephone and postal surveys. Occasionally only a partial survey was possible, so the number of households contacted for a given question varies.

Of the 2,351 total households identified in the survey area, an estimated 1,296 households (55%) participated in the 2003 subsistence fishery (Table 7). The total population of the surveyed communities was estimated to be 9,307 people (Table 8). Based on the postseason surveys, approximately 47,603 Chinook, 75,210 summer chum, 36,493 fall chum and 11,964 coho salmon were harvested in the surveyed villages (Table 9). Households reported being given 6,050 Chinook, 10,275 summer chum, 1,881 fall chum, and 597 coho salmon from subsistence fishers (Appendix A.9). Households also reported being given 5 Chinook, 20 summer chum, and 30 fall chum salmon from commercial fishers (Appendix A.10). Of the salmon harvested and/or given away to households, approximately 46,415 Chinook, 81,327 summer chum, 35,903 fall chum, and 11,575 coho salmon were used for subsistence purposes (Table 10).

Approximately 107,204 other fish (pink salmon, whitefish, northern pike and sheefish) were reported harvested throughout the Yukon Area in the past year (Table 11). The most common gear type for subsistence salmon fishing was gillnets (set and drift) followed by fish wheels and other gear (Table 1). Tables 13 through 16 provide the breakdown of harvest by community, by district, and by river drainage. Salmon were harvested throughout the Yukon Area, although most of the subsistence harvest from surveyed households occurred in Districts 4 and 5 for Chinook salmon, Districts 1 and 4 for summer chum salmon, District 5 for fall chum salmon, and District 4 for coho salmon. Approximately 4,467 dogs were estimated to live in the various surveyed Yukon River communities (Table 2). Although 1,298 Yukon River surveyed households reported owning dogs, only 14% of those households feed fish to dogs. Surveyed households indicated that they fed their dogs approximately 23,316 summer chum, 23,385 fall chum and 6,229 coho salmon from subsistence harvests and no salmon from commercial harvests (Tables 4 – 5).

Success in meeting subsistence salmon needs by species was 65% for Chinook, 64% for summer chum, 68% for fall chum, and 66% for coho salmon (Table 17). Successful households were defined as those who met more than 50% of their subsistence salmon needs. Approximately 34% of households were unsuccessful, meeting 50% or less of their subsistence salmon needs.

Households gave various reasons for not meeting their subsistence needs, including work conflicts; poor run size; fishing was closed when the fish were running; the “windows” schedule; gear restrictions; and not enough money for the boat, net, gas, or repairs.

302 respondents said they did not fish for salmon in 2003. Thirty-six of these respondents said they were unable to fish because of their work schedules. Thirty-two households cited equipment failure, and twenty-two people cited health reasons. The remaining respondents did not give a specific reason for not fishing.

In 2003, a few households not selected for the survey were, in fact, surveyed. The data from these households has been incorporated into the results. This is the reason, for example, why Scammon Bay had a 107% survey rate (Table 6). The addition of these extra surveys is not statistically significant.

Calendars

In May 2003, 2,360 calendars—1,260 Lower Yukon and 1,100 Upper Yukon—were mailed to Yukon Area communities. Fishers returned a total of 285 subsistence harvest calendars in 2003 (12% of total distributed). Two hundred and twenty returned calendars (77%) included salmon harvest. Twenty-three percent of the households that returned harvest calendars in 2003 either indicated that they “did not fish” (19%) this season or the calendars were returned unused (4%).

Reported harvest on calendars was 18,185 Chinook, 21,941 summer chum, 10,888 fall chum, 3,111 coho, and 460 pink salmon (Figure 3). Data from the returned calendars are not calculated directly into the Yukon Area harvest estimate, as any households selected for the survey are expanded for in the survey results. The calendar data does, however, corroborate harvest and personal information for surveyed households. In 2003, calendar data from a few fishers was included in the overall harvest total (Table 1). These fishers do not live in a Yukon Area surveyed community but travel to a non-permit area of the Yukon River to subsistence salmon fish.

Additional information gathered from completed calendars includes salmon harvests by day. The calendars provide the only data on the timing of the salmon runs, as the calendars break down harvest for each species by day. Calendars are typically used by subsistence fishers in Districts 1 – 4 and a portion of District 5.

Permits

Subsistence

In 2003, 397 subsistence permits were returned, 90% of the total issued (Table 18). Subsistence permit holders reported harvesting 8,221 Chinook, 3,192 summer chum, 16,464 fall chum, 10,508 coho salmon, 4,378 whitefish, 202 sheefish, 117 burbot, 1,256 pike, 821 suckers, and 1,216 grayling (Tables 18 – 19). The most common gear types reported used were set gillnets and fish wheels (Table 1). The largest percentage of salmon permits were issued for the Yukon River area near Circle and Eagle (22%) (Table 18). Based on permits, 104 households indicated that they fed salmon to dogs (Table 3). These households reported retaining 14,331 whole

salmon for dog food. Additional information gathered from completed permits includes harvest timing data.

Personal Use

Personal use permits are only issued for the Fairbanks Nonsubsistence Area (Figure 4). Seventy-two personal use permits were returned from the 2003 season, 97% of the total issued (Table 18). Personal use permit holders reported harvesting 204 Chinook, 148 summer chum, 394 fall chum, 549 coho salmon, and 22 whitefish, 1 sheefish, 5 burbot, 135 suckers, and 7 grayling (Tables 18 – 19). The most common gear type reported used was set gillnets (Table 1). Personal use fishing is defined as the means for the taking of finfish by an individual for consumption as food or use as bait by that individual or his immediate family [5AAC 77.001(f)]. Under this interpretation, fish caught under the personal use guidelines may not be fed to dogs. Historically, this fishery was conducted as a subsistence fishery prior to the designation as a non-subsistence area.

DISCUSSION

The 2003 Yukon Area subsistence salmon harvest was approximately 56,959 Chinook, 82,272 summer chum, 56,930 fall chum, and 23,872 coho salmon (Appendix B.1-B.4). This subsistence harvest is an overall increase of approximately 13% above the recent five-year average (1998 – 2002). For individual species, the harvest was above the most recent five-year average harvest for Chinook (17%), fall chum (25%), and coho salmon (30%), and essentially equal for summer chum salmon (Appendices B.1 – B.4). In January 2001, the Alaska Board of Fisheries (BOF) determined the amounts of salmon in the Yukon-Northern Area reasonably necessary for subsistence use or “amounts necessary for subsistence” (ANS). These levels include 45,500 – 66,704 Chinook, 83,500 – 142,192 summer chum, 89,500 – 167,900 fall chum, and 20,500 – 51,980 coho salmon (Figures 5 – 8). The 2003 harvest of Chinook and coho salmon were within the range of ANS (Figures 5 and 8). The summer chum salmon harvest was nearly equal, and the fall chum salmon subsistence harvest was 35% below the lower ANS boundary as defined by the BOF (Figures 6 - 7). The recent trend of overall decline in fall chum subsistence salmon harvests showed improvements in 2003, as illustrated in Figure 7.

The results of the 2003 postseason survey indicated that the Chinook salmon harvest was above average. The above average harvest was also confirmed by fishers throughout the summer season on the Yukon River Fisheries Drainage Association (YRDFA) teleconferences and from reports from the USFWS inseason harvest surveys technicians located in Emmonak, Holy Cross, Nulato, Galena, and Circle (Gerken and Holder *in preparation*). Except for the Koyukuk River communities, most subsistence fishers reported that their needs were generally being met in a timely manner and the quality of the Chinook salmon was better in 2003 than in recent years, with many “fat” fish and fewer fish with sores and scarring.

In 2003, the Yukon River was ice-free on May 17; this was the second earliest date since the department began maintaining records (1961) and ten days earlier than the historic average of May 27 (1962-2002). The first subsistence catch of Chinook salmon was reported on May 22 near Alakanuk. The department’s test fishing project in Emmonak recorded its first Chinook salmon catch immediately after setting the test fishing nets on May 27. Early in the season, low

water levels and unusually clear water characterized river conditions. Elders noted this water condition to be the lowest and clearest the Yukon River has been in many years that early in the season. Near normal water levels were prevalent from mid-June to the end of the summer season. During the weekly YRDFA teleconferences, there were few complaints about poor fishing conditions because of water level and debris in the water, except for the Koyukuk River. Fishers along the Koyukuk River and its tributaries had difficulties meeting their needs because of high water and a heavy debris load. Throughout the summer and fall seasons the weather in much of the Yukon Area was atypical, with high-pressure systems, warm temperatures, low rainfall and low water levels. These weather patterns continued to contribute to good fishing conditions in most Yukon Areas.

One way the BOF assesses whether fishers met their subsistence needs is through the ANS levels. As stated earlier, the 2003 harvests were within the ANS levels for Chinook and coho, slightly below the bottom of the range for summer chum, and 35% below the ANS level for fall chum salmon (Figures 5-8). This below-average ANS result for fall chum salmon does not reflect salmon that did not come from the Yukon Area subsistence salmon fishery.

For example, in 2003 residents from Eagle received replacement fish from the Valdez hatchery. Many Eagle residents traditionally fish for fall chum salmon to be used as dog food. To allow rebuilding of stocks destined for Canada, in 2001 and 2003 Eagle residents were offered the voluntary option of being given fish for dog food in exchange for agreeing not to fish on the Yukon River. Participants received approximately 14,500 to 15,000 coho salmon from the Valdez Fishery Development Association's hatchery. The 2003 harvest numbers do not include these non-Yukon River fish; if the Valdez hatchery fish were added to the harvest numbers, then the subsistence use might have approached the lower end of the ANS for fall chum salmon. The U.S./Canada Research and Enhancement project funded the Eagle replacement fishery program.

A second example is the District 6 commercial roe fishery. As part of this fishery, commercial fishers from Nenana and the Fairbanks area harvested an estimated 14,000 female fall chum and coho salmon, and the carcasses of these fish were returned to the fishers and were used for subsistence dog food. These situations demonstrate how subsistence harvest numbers alone may not reflect the full subsistence need. It is important to remember this, as harvest levels affect historical numbers that may be used to generate future ANS levels.

The department began inquiring during the 1992 postseason survey whether a household's subsistence salmon needs had been met that year. Even in years of relatively good salmon returns, based on escapement, approximately 20-30% of the households state that their needs were not met. However, this line of questioning included all surveyed households, regardless of whether or not they actively fished that season.

This "needs met" question has been reworded in recent years to more clearly represent fishing success. The 2003 version attempted to target only those households that actually fished for a particular species. Out of choice or opportunity, fishers may fish for one species and not another. For example, summer chum and coho salmon rarely travel up the mainstem Yukon River past the confluence with the Tanana River, so many upstream communities do not have the opportunity to fish for summer chum salmon. Another example is the Lower Yukon, where

fishers do not depend as much on fall chum salmon, instead choosing to put away Chinook and summer chum salmon while the weather is good for drying fish. In 2003, the survey asked respondents to estimate their success in meeting their subsistence needs for each individual salmon species (25%, 50%, 75%, and 100%). The department defined "success" as a reported harvest of greater than 50% of the household's need, and responses of less than 50% were considered "unsuccessful." The number of responses varies from species to species (Table 17). Far more households (639), for example, fished for Chinook salmon and commented on Chinook salmon success than for coho salmon (116). With the new question design, the data should more accurately reflect success since the data does not include responses from people who did not fish or did not fish for a particular species.

However, if a respondent did not fish, then an issue arises about how to compare the 2003 data with data from previous years. Previously, if someone did not fish, their response to the "needs met" question would still have been included in the data for that question. In 2003, however, the "needs met" data only includes responses from those who fished. This leaves households that do not fish unrepresented in the "needs met" data in 2003. An example of an unrepresented household is an elder who no longer fishes but still has subsistence needs. The elder likely receives fish from others, and it is still a legitimate question to ask whether or not the elder's needs were met. In future years, the question can be adjusted so that both questions, "percent success" by fishing households and "needs met" by all households, can be addressed in the survey. To be more comparable to the 2003 data, the historical data (1992 to 2002) concerning needs met could also be reanalyzed to look at the responses of only those households that fished.

Upstream and downstream communities on the mainstem Yukon reported approximately the same level of success. The success level was also similar for all four salmon species surveyed (Table 17). Some tributary communities, such as Huslia, Venetie, and Chalkyitsik, reported low levels of success for Chinook salmon, but the number of responses was also low. Some fishers reported high water during the Chinook salmon season. The survey does not consider whether fishers from tributary communities traveled to the mainstem Yukon River to fish.

The Coastal District communities of Hooper Bay and Scammon Bay reported the lowest success rates (Table 17). One reason for this is was concern over an apparent oil spill in Kokochik Bay, between Hooper Bay and Scammon Bay, during the short Chinook salmon run. Residents told the department's surveyors that they were advised to pull their nets because of the spill, and they never heard back about whether it was okay to put the nets back in or whether the fish were safe to eat. Representatives from the department and the Department of Environmental Conservation (DEC) independently visited Hooper Bay in June to investigate these incidents. Three incidents apparently occurred in May and June, and residents reported seeing dead fish on the beaches and an oil sheen on the water. Many concerned fishers pulled their nets. DEC representative Bob Carlson concluded that several incidents had possibly occurred but there was not enough evidence to determine what had happened. Fortunately, there did not appear to be any continuing threat to subsistence activities. He also noted a lack of agreement in the community over what had occurred, and there was confusion over how to report and handle spills (B. Carlson, DEC, email message to Larry Dietrick, June 12, 2003). This confusion apparently resulted in fishers not knowing whether it was okay to fish, as evidenced by comments to the surveyors. Approximately twenty percent of residents surveyed commented on the summer's

“pollution” problem and many cited “pollution” as the reason why their household did not meet their subsistence needs for Chinook and summer chum salmon.

If the household was unsuccessful in meeting its subsistence needs, then surveyors followed up by asking the reason why the household was unsuccessful. In 2003, surveyors received 238 comments referring to fishing success. Twenty comments cited weather or water-related fishing conditions as the reason for the household’s poor fishing. Eighty-four comments referenced the windows schedule and/or run timing.

The survey also asks for additional comments on the fisheries. Unlike the rest of the survey, the comments are qualitative, not quantitative, so it is not possible to summarize the comments in a numeric table. Comments generally covered topics such as the BOF windows schedule, run timing, weather and water-related fishing conditions, and drifting in Subdistricts 4-B and 4-C. Ten comments addressed the use of drift gillnets in Subdistricts 4-B and 4-C. Under existing regulations, drift gillnets are allowed from the mouth of the Yukon to 18 miles below the community of Galena. Some residents of Galena, Ruby, and Koyukuk would like drift gillnets to be allowed in Subdistricts 4-B and 4-C.

In 2001 the BOF implemented a new subsistence schedule on the Yukon River. This schedule was a response to poor runs and was intended as a conservation measure. The schedule laid out “windows” of allowed fishing time for each district. During these windows, salmon may migrate upriver with reduced exploitation. The schedule intends to reduce harvest early in the run, when there is a much higher level of uncertainty in projecting the total run abundance. Another goal is to distribute the harvest throughout the run, thereby reducing the impact on any particular component of the run, and to spread subsistence harvest opportunities among users along the river. In 2003, the BOF clarified the windows schedule by allowing the department to relax the subsistence schedule in districts where there has been no commercial fishing.

Since its implementation, surveyors have received many comments from residents about the schedule. In 2003, surveyors received 81 comments opposed to the schedule, and three in favor. Common comments were that the fishing schedule is too restrictive, the schedule is a hardship to people with regular work hours, and there is more competition for fishing sites, since everyone in a village has to fish on the same schedule. Some fishermen wanted to change the specific hours scheduled for their district. In general, fishers point out that by restricting fishing times the windows schedule reduces the ability of fishers to adapt to circumstances such as poor weather, water levels, debris in the water, work schedules, etc. For some fishers, the schedule prevents them from catching all their fish at once and stretches out their season, an important consideration when gas costs and work schedules limit the number of possible trips to a fishcamp. In 2003, some residents commented that the openings were not good for drying fish, as the openings coincided with wet weather.

Most comments about the BOF windows schedule have come from Districts 1 and 2. In 2003 this continued to be true, with most comments coming from Emmonak, St. Mary’s, and Mountain Village. One possible reason for this is that the BOF schedule implemented in 2001 represented the first time that fishers from those areas had to salmon fish on a schedule. Subsistence fishing used to be continually open until the commercial season began. Fishers

typically fished first for subsistence while the drying weather and fish quality was good, and then residents switched over to commercial fishing. Commercial openings were not on a set schedule, but were opened by Emergency Order (EO). Subsistence fishing was only restricted during a regulated time period before, during, and after commercial periods. Upriver districts, meanwhile, had been on schedules prior to the introduction of the BOF schedule in 2001. These schedules varied by district, but upriver residents were already accustomed to having a set schedule for subsistence fishing once commercial fishing began.

In 2003, a new survey question asked households to estimate the number of each salmon species that were "lost." Fish lost included salmon that were not used for human consumption due to spoilage, predators, weather, sick fish, and other circumstances. In many cases, fish not suitable for human consumption were fed to dogs. The question about "lost" fish was used in 1992-1994 in conjunction with the Subdistrict 4-A roe fishery, and in 2003 it was expanded to the entire drainage. The purpose of this question was to identify salmon that were harvested but might not usually be reported. For example, in the past it has been suggested that families often do not report "jack" and/or diseased Chinook salmon as part of their total Chinook salmon harvest since these fish are not desirable for human consumption. Likewise, when reporting harvest, many fishers think about how many fish they have put away for the winter, and so might not include a batch of fish spoiled by weather while drying.

Respondents identified sick fish as being the primary cause of "lost" fish (51%), and these fish were almost exclusively cited as suffering from *Ichthyophonus hoferi* (Appendix A.12). The village of Tanana accounted for most of the *Ichthyophonus* fish, reporting 466 Chinook, 357 summer chum, and 863 fall chum salmon lost. These figures from Tanana represent 75%, 92%, and 100%, respectively by species, of all salmon reported lost to *Ichthyophonus* in surveyed communities. One possible reason for this is that Tanana residents have had more opportunity to become familiar with *Ichthyophonus* because in 2001 and 2002 an *Ichthyophonus* research project operated in the Tanana vicinity. Tanana's fishers may be more aware of the symptoms and may more carefully inspect fish for the disease. A second reason is that Chinook salmon suffering from *Ichthyophonus* show few observable symptoms when they first enter the river. Approximately 25-30% of Yukon River Chinook salmon may enter the Yukon infected with *Ichthyophonus*, but at the mouth only 4% exhibit clinical signs of the disease. By the time the salmon travel 667 miles upstream to the Tanana village area, nearly thirty percent of fish show clinical signs of the disease (Kocan 2002). In the Lower Yukon Area, few fishers reported fish lost to *Ichthyophonus*.

Ichthyophonus requires knowledge and care to correctly diagnose, and in the absence of clear clinical signs, diagnosis depends on lab tests. The Tanana survey numbers are based on fishers' reports, and not on lab analysis. As more people hear about *Ichthyophonus*, it is possible some respondents may simply identify any apparently sick fish as suffering from the disease. Also, other respondents reported symptoms such as yellow skin and flesh, lesions on skin, brown spots and stripes in flesh, "lumps" on Chinook salmon, white pus and sores, and bad livers. It is not possible to know the exact cause of these reported symptoms.

As fishers become more aware of *Ichthyophonus*, they have asked the ADF&G surveyors questions about whether the diseased fish are safe for humans or dogs to eat. The disease is not

transferable to humans, and the flesh can be eaten. Cooking the flesh is recommended, as is the case with all wild meats. People have also wanted to know more about the causes of the disease and the prognosis for the future. The disease has always been present, but the incidence of disease appears to increase as water temperatures increase. Awareness increased in the 1990s when Chinook salmon returned in extremely poor physical condition.

Sometimes commercially caught fish are kept for subsistence use, and the survey attempts to account for these fish in the total subsistence harvest. Occasionally, a few commercially caught Chinook salmon, often “jacks,” are retained for subsistence use. However, most commercially caught salmon kept for subsistence are summer chum salmon caught in the roe fishery, where the eggs are commercially sold and flesh is kept for subsistence, typically for dog food (Borba and Hamner 2001). From the mid 1970s until the mid 1990s, there was a strong roe fishery on the Upper Yukon (Districts 4-6). Villages in Subdistrict 4-A and in District 6 on the Tanana River primarily sold summer chum salmon roe, while Subdistricts 4-B and 4-C and Districts 5 and 6 had a fall chum and coho salmon roe fishery. In 1997, however, poor returns combined with the collapse of the roe market led to the end of most of these fisheries. In 2003, the roe fishery was limited to the fall commercial season in District 6.

In 2003, all salmon caught in the commercial season in the surveyed communities were sold for flesh, and no commercially caught whole salmon were retained for dog food (Table 5). However, this does not include the carcasses from the District 6 fall chum and coho salmon roe fishery.

In 2003 there was an estimated 12% decrease in the number of dogs, compared to the 1998-2002 average (Appendix B.10). Perhaps reflecting the trend of declining salmon runs, the number of whole salmon fed to dogs in the Yukon Area has decreased significantly since 1997, the last year of strong salmon runs. In 2003, however, the amount of whole salmon fed to dogs was 18% higher than the recent five-year average. Households reported feeding an estimated 23,316 summer chum, 23,385 fall chum, and 6,229 coho salmon to dogs. These were 62%, 14%, and 30% increases, respectively, compared to the 1998-2002 average (Appendix B.10). Chinook salmon are generally not fed to dogs, except for fish that have scarring or show signs of sickness, are late in the run and so not suitable for human consumption, or perhaps small “jacks.”

When determining the number of salmon typically harvested and put up for dog food, one must consider salmon obtained from sources other than the subsistence harvest. In 2003, fishers received salmon from the District 6 commercial roe fishery and the Eagle replacement fishery. If these options weren't available, then subsistence numbers for fall chum salmon would have been higher, since the required fish would likely have been caught during a subsistence opening.

Although 104 households returned subsistence permits (Table 3), only 103 permits were included in the total. This is because one permit holder was also surveyed during the subsistence surveys, so that permit holder's data was accounted for through the survey. This is also why there are 284 households that reported feeding salmon to dogs (181 surveyed households plus 103 permit households).

The 2003 Chinook salmon run was anticipated to be average to poor, but the run turned out to be unexpectedly strong—abundance was assessed at near average and the best run since 1997. The

Chinook salmon run was early this year, while the summer chum salmon run showed near normal timing, so that a distinct gap existed between the Chinook and summer chum salmon runs. Inseason, some users complained they were not informed that the Chinook run was early, and this may account for some of the households who indicated their needs for Chinook salmon were not met.

During the season, the department's escapement projects for summer chum salmon did not reflect the higher escapement numbers indicated by the Pilot Station Sonar project. This led to subsistence fishing for summer chum salmon being closed in late June in Districts 1 and 2. Once other indicators began to show higher run numbers, the regular subsistence fishing schedule was re-instituted on June 29 and 30.

Because of the recent trend of poor runs, fall salmon fishery management approached the season conservatively. The 2003 preseason outlook for fall chum salmon was for a below average to poor return similar to 2001 and 2002. The 2003 coho salmon run was expected to be average, but because of the overlap in run timing between coho and fall chum salmon, coho salmon are affected by fall chum salmon management. Managers initially assessed the fall chum salmon run as poor, and fishers were immediately placed on a restricted schedule that reduced the fishing time allowed under the regular BOF schedule by one-half to two-thirds, depending on district.

As the 2003 fall season progressed, it became apparent that the run was either very early or much stronger than anticipated. However, downriver fisheries projects contradicted each other's run assessments, so managers had to wait for confirmation on run strength from upriver projects. As the run progressed and looked better than predicted, restrictions were relaxed and districts were reverted to the BOF schedule. The schedule was relaxed sequentially as fish moved up the river, so that lower districts were relaxed first.

Managers reassessed the run as upriver projects confirmed the presence of a good run. By August 21, limited commercial fisheries began in District 1, followed by Subdistricts 4-B and 4-C, and Subdistricts 6-B and 6-C. Commercial seasons opened in other districts, but no periods were announced because there was no market. The 2003 seasons marks the first commercial fishing efforts for fall chum and coho salmon in the last three seasons (2000-2002).

In the end, run timing for fall chum salmon was near normal, with the second half of the run slightly more abundant. The overall escapement was average to above average, except for the Porcupine River stocks, which were judged to be slightly below average to average. The Sheenjek and Fishing Branch Rivers, both on the Porcupine River system, did not meet their escapement goals. All other stocks, including the Yukon River mainstem upstream of Tanana Village, the Tanana River mainstem, and the Toklat, Delta, and Chandalar Rivers all met or exceeded their minimum escapement goals. Meanwhile, approximately 277,000 coho salmon passed by the Pilot Station sonar site prior to August 31 (McIntosh *in press*). This was more than twice the recent five-year average of 128,000 fish.

Fall chum salmon are difficult to manage because they enter the Yukon River in pulses, rather than in a steady pattern. This makes it hard to assess the run or compare runs from year to year. With hindsight, the subsistence fishing restrictions could have been relaxed earlier, and

commercial fishing could have commenced sooner, but with the trend of poor runs, it was necessary to manage conservatively. The extra restrictions in 2003 may have reduced subsistence harvest from the beginning of the fall season through August 20. Fortunately, most fishers were still able to meet their subsistence needs.

Appendices B.1 through B.4 document the historical annual subsistence salmon harvest from 1992 to 2003 by species and by community of residence. Chinook and coho salmon subsistence harvests have remained relatively stable over the years, while recently the harvests of summer and fall chum salmon have significantly decreased. The fall chum salmon harvest reflects the conservation measures taken to protect the stocks during extremely poor runs. In 2003, however, fall chum salmon made an unexpected rebound and improved significantly. Summer chum salmon harvest has leveled-off after a sharp decline in the 1997 season. Appendices B.5 through B.7 document the historical subsistence and personal use harvest from permits issued since 1974 to the present, by species and by permit area. After several years of declining numbers of Yukon and Tanana River permits issued and salmon harvested, 2003 generally marked a slight increase in both permits issued and the ensuing harvest.

Pink salmon harvest information has been collected in surveyed communities in the Yukon Area since 1994 (Appendix B.9). Although pink salmon are often locally abundant in the Lower Yukon Area, they are not typically sought after and harvests remain low. The 2003 pink salmon return and corresponding harvest was above average for odd years but below average for all years. Pink salmon have a cyclic fluctuation on the Yukon River, with even years producing larger returns than odd years. This pattern has been confirmed by the Pilot Station sonar, which counted approximately 65,100 pink salmon in 2002 (McIntosh *in press*), as compared to the 2003 (odd year) total of only 5,600 pink salmon. These numbers should be used only as an index, as the sonar project does not attempt to estimate the passage of all pink salmon.

The 2003 combined subsistence and personal use harvests of whitefish and sheefish was lower than in 2001 and 2002 for whitefish and in 2002 for sheefish, but still 6% and 5% above the recent five-year average, respectively. The slight decrease in 2003 may be partially attributed to fishers having more fishing time to target salmon species. During the reduced salmon fishing schedules or closures in 2001 and 2002, fishers may have targeted non-salmon species to supplement their subsistence salmon harvest. Pike harvest, on the other hand, was 35% above the recent five-year average, and second highest reported harvest since 1993 (Appendix B.12). This increase is attributed to a sharp spike in permits issued for the Tolovana River drainage—the pike harvest was 79% above the five-year average in permitted areas (Appendix B.12). Also, an estimated harvest of 5,200 pike in the community of Huslia helped contribute to a 33% increase over the recent five-year average for surveyed villages (Table 11, Appendix B.12). During the summer and fall salmon seasons, the harvests of non-salmon species were restricted to small mesh gear only. Without these restrictions even greater increases might have been seen in the harvest of non-salmon species. For example, the department received reports from Koyukuk River residents that the four inch set gillnet mesh restriction in place during the fall season (to conserve fall chum salmon) was too small of a mesh to effectively harvest the large whitefish and sheefish that migrate through the area at approximately the same time as the fall chum salmon. High water during most of the fall season further hindered these fishers.

Although harvests of non-salmon species from subsistence and personal use fisheries within the Yukon Area are included in this report, the estimates generated for the surveyed communities may be imprecise because the stratification system used to expand to the total catch is based on a household's historical salmon harvests. The correlation between the level of salmon harvest and the level of non-salmon harvest has not been determined. In order to improve the harvest estimates of non-salmon species, additional strata and sampling designs would need to be identified and developed (Borba and Hamner 1998).

As the Yukon Area fishery changes, adjustments to the strata and sampling design are continually considered in order to produce the best harvest estimates possible. In 2003, for example, the harvest levels for the Lower and Upper Yukon Areas harvest strata were the same for the first time. The changes in harvest levels were made because of an identified change in use patterns on the Yukon River. Upriver, fishers identified as "high users" were typically people with dog teams who were fishing fall chum salmon to feed their dogs. In recent years, there have been fewer dog teams, and consequently now there are fewer fishers that would qualify as high users under the old harvest level criteria. The new criteria reflect today's lower harvest numbers and reclassify more households as medium-level users. After the 2003 survey, harvest estimates were generated using both the pre-2003 and the new harvest strata. Results showed no significant difference in the harvest estimates. Another related trend is that since 1990, the number of households in the heavy and medium user groups has decreased from approximately 19% to 10%, while the number of households in the light user group has increased from 22% to 43%.

An ongoing concern is to identify and account for the harvest of fishers who do not live in a Yukon Area surveyed community but travel to a non-permit area of the Yukon River to subsistence salmon fish. Calendars are mailed to identified fishers, so some harvest data may be recovered. In the past this harvest was not deemed significant, so it was not included in the overall harvest totals. In 2003, the harvests of six known fishers who fall into this category were included in the overall harvest totals. While this harvest is likely not significant to the overall Yukon Area harvest, it may be significant in localized areas, such as Subdistricts 5-B and 5-C.

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Table 1. Subsistence and personal use salmon harvest estimates which include test fish harvests provided for subsistence use, and related information, Yukon Area, 2003.

Community ^a	Survey Date, Permit Village,	Number of Fishing Households ^b	Number of Dogs	Estimated Harvest				Primary Gear Used ^c		
				Chinook	Summer Chum	Fall Chum	Coho	Set Gillnet	Drift Gillnet	Fish Wheels
Hooper Bay	9/12-15	140	291	722	10,658	40	244	44	0	0
Scammon Bay	9/11	50	74	1,128	3,310	106	48	22	0	0
Coastal District Total		190	365	1,850	13,968	146	292	66	0	0
Nunam Iqua ^d	9/10-11	26	41	925	2,561	127	117	18	0	0
Alakanuk ^e	9/7-10	78	141	1,707	5,287	348	193	15	4	0
Emmonak ^e	9/6-8	76	194	2,763	7,644	1,257	547	17	19	0
Kotlik ^e	9/8-9	54	107	937	4,209	407	403	16	5	0
District 1 Subtotal		234	483	6,332	19,701	2,139	1,260	66	28	0
Mountain Village ^e	9/15-17	108	213	2,174	6,497	873	736	6	30	0
Pitkas Point	9/19	15	83	633	800	49	130	1	10	0
St. Marys	9/17-18	81	79	1,916	4,521	762	276	3	35	0
Pilot Station ^e	9/20-21	53	108	2,886	4,163	823	371	3	26	0
Marshall	9/21-22	46	246	2,059	792	394	64	3	15	0
District 2 Subtotal		303	729	9,668	16,773	2,901	1,577	16	116	0
Russian Mission ^e	9/21-22	42	170	2,057	171	615	178	1	12	0
Holy Cross	9/23-24	39	36	2,395	214	9	498	9	8	0
Shageluk	9/30	18	92	550	5,473	114	35	8	7	0
District 3 Subtotal		99	298	5,002	5,858	738	711	18	27	0
Lower Yukon River Total		636	1,510	21,002	42,332	5,778	3,548	100	171	0
Anvik	10/1-4	19	83	1,286	844	179	12	13	3	0
Grayling	9/25-26	37	48	1,613	1,072	441	559	1	9	0
Kaltag ^e	10/13	47	73	1,838	1,028	725	463	0	14	0
Nulato	10/14-15	46	233	2,531	180	1,341	928	2	9	0
Koyukuk	10/16-17	16	70	818	1,339	835	1,155	4	9	0
Galena	10/18-19	78	421	3,112	289	1,510	1,507	11	10	1
Ruby	10/13	16	175	631	876	2,331	648	4	0	4
Non-survey/permit ^k	calendars	1	0	42	0	0	0	1	0	0
District 4 Yukon River Subtotal		260	1,103	11,871	5,628	7,362	5,272	36	54	5
Huslia	10/16-17	32	273	469	6,187	1,786	375	10	0	0
Hughes	10/14-15	6	50	113	1,265	497	20	6	0	0
Allakaket	10/20-21	21	180	306	4,383	105	99	8	0	0
Alatna	10/20	2	4	12	50	0	7	2	0	0
Bettles	10/20	0	118	0	0	0	0	0	0	0
Koyukuk River Subtotal		61	625	900	11,885	2,388	501	26	0	0
District 4 Subtotal		321	1,728	12,771	17,513	9,750	5,773	62	54	5
Tanana	10/27-28	38	225	5,332	3,075	14,308	3,480	10	0	9
Rampart ^e	10/15	5	17	1,411	5	365	0	5	0	0
Fairbanks NSB ^f	permits	56	274	1,932	89	105	120	55	0	1
Stevens Village ^g	11/3-4, permits	13	87	1,121	0	857	0	11	0	0
Birch Creek	10/9-10	3	6	78	0	2	0	3	0	0
Beaver	10/30-31	10	10	1,156	7	192	0	7	0	1
Fort Yukon	10/6-9	70	412	4,002	2,176	7,190	244	11	0	17
Circle	permits	12	73	895	85	499	0	6	0	6
Central	permits	3	6	144	0	0	0	3	0	0
Eagle ^h	permits	37	271	2,081	104	2,871	0	29	0	8
Other ^j	permits	8	48	531	0	0	25	8	0	0
Non-survey/permit ^k	calendars	5	14	333	4	771	9	5	0	0
District 5 Yukon River Subtotal		260	1,443	19,016	5,545	27,160	3,878	153	0	42

-Continued-

Table 1. (page 2 of 2).

Community ^a	Survey Date, Permit Village,	Number of Fishing Households ^b	Number of Dogs	Estimated Harvest				Primary Gear Used ^c		
				Chinook	Summer Chum	Fall Chum	Coho	Set Gillnet	Drift Gillnet	Fish Wheels
Venetie	10/10-11	7	61	125	0	770	11	5	0	0
Chalkyitsik	10/10-12	4	32	50	0	340	7	3	0	3
Chandalar and Black Rivers Subtotal		11	93	175	0	1,110	18	8	0	3
District 5 Subtotal		271	1,536	19,191	5,545	28,270	3,896	161	0	45
Manley	permits	6	224	213	65	1,303	886	3	0	3
Minto	permits	17	81	317	625	675	423	16	0	1
Nenana	permits	22	296	1,215	2,246	7,840	5,431	13	0	9
Healy	permits	3	36	0	0	1,253	2,574	3	0	0
Fairbanks NSB ^m	permits	38	135	574	126	2,305	1,598	34	0	4
Other ⁿ	permits	19	94	30	0	4	0	18	0	0
District 6 Tanana River Subtotal ^p		105	866	2,349	3,062	13,380	10,912	87	0	17
Upper Yukon River Total		697	4,130	34,311	26,120	51,400	20,581	310	54	67
Survey Village Subtotal		1,296	4,453	47,603	75,210	36,493	11,964	282	225	35
Subsistence Permit Subtotal ^r		189	1,538	7,728	3,192	16,461	10,508	156	0	32
Subsistence Test Fish Subtotal ^s		-	-	1,253	3,866	3,205	1,391	-	-	-
Subsistence Non-survey/permit Subtotal ^k		6	14	375	4	771	9	6	0	0
Subsistence Harvests Subtotal		1,491	6,005	56,959	82,272	56,930	23,872	444	225	67
Personal Use Permit Subtotals		32	-	204	148	394	549	32	0	0
Alaska, Yukon River Total ^s		1,333	5,640	55,313	68,452	57,178	24,129	410	225	67
Alaska, Yukon Area Total		1,523	6,005	57,163	82,420	57,324	24,421	476	225	67
AK, Yukon Area Percentages of the Total		-	-	26%	37%	26%	11%	59%	28%	8%

^a Data collected by Alaska Department of Fish and Game (ADF&G), Division of Commercial Fisheries. Survey data is expanded for number of fishing households, number of dogs, and harvest. Permit data is unexpanded, and is from all permits received as of June 26, 2004. The number of dogs is based on information obtained from permits issued, while the number of fishing households and their harvest is based on returned permits.

^b Estimated number of households that fished in surveyed communities or number of permit households who reported fishing in permit required areas.

^c Primary Fishing Gear is not expanded for households that were not surveyed.

^d Formerly known as Sheldon or Sheldons Point.

^e Test fish have been added to the total fish harvested in a village as reported in the postseason survey.

^f Fairbanks North Star Borough (Fairbanks NSB) households that obtained a permit and indicated they fished in the Yukon River permit required area.

^g Permit harvest information from Stevens Village residents was used to complement the information obtained by the survey.

^h Does not include approximately 14,500 to 15,000 coho salmon obtained from Valdez Fisheries Development Association as part of the *Enhance Mainstem Salmon Escapement Project* (URE-12-03) funded by US/Canada Restoration and Enhancement Fund.

ⁱ Other includes residents of Coldfoot, Manley, Nenana, Minto, and the Upper Tanana River drainage villages of Northway and Tok who obtained a household permit and fished in a Yukon River permit required area.

^j Non-survey/permit includes residents of Manley, Nenana, and the Fairbanks Area who reported harvest on the Yukon River in a non-permit area and are not residents in a surveyed village. Harvest was obtained from harvest calendars and from other means.

^m Fairbanks North Star Borough (Fairbanks NSB) households that obtained a subsistence and/or personal use permit and indicated they fished in the Tanana River permit required area.

ⁿ Other includes residents of Eagle River, Denali Park, Anderson, Lake Minchumina, Paxson, and the Upper Tanana River drainage villages of Delta Junction, Tanacross, Tok, and Northway who obtained a permit and fished in the Tanana River.

^p Does not include approximately 14,000 coho and chum salmon sold commercially for roe and carcass returned to fishermen for dog food in Subdistrict 6-B.

^r Subsistence Permit Subtotal does not include Stevens Village.

^s Test fish given away for subsistence use.

^t Does not include Coastal District.

Table 2. Estimated number of households with dogs, number of households that feed fish to dogs, numbers of dogs, and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2003.

Community	Total Households	Households Contacted	Number of Households with Dogs		Number of Households that Feed Fish to Dogs		Number of Dogs	
			Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)
Hooper Bay	197	53	96	28	7	13	291	136
Scammon Bay	81	26	36	16	0	0	74	32
Coastal District	278	79	132	32	7	13	365	140
Nunam Iqua ^a	35	23	20	2	1	1	41	5
Alakanuk	126	26	73	26	8	14	141	63
Emmonak	159	57	95	20	1	1	194	51
Kotlik	89	30	51	17	1	1	107	31
District 1	409	136	239	37	11	14	483	87
Mountain Village	147	43	84	23	4	7	213	104
Pitkas Point	25	12	22	3	0	0	83	62
St. Mary's	112	40	38	18	7	10	79	36
Pilot Station	97	41	47	13	4	4	108	39
Marshall	75	21	45	17	3	2	246	178
District 2	456	157	236	36	18	13	729	221
Russian Mission	61	18	37	13	0	0	170	89
Holy Cross	55	20	24	17	0	0	36	21
Shageluk	32	26	25	2	9	2	92	10
District 3	148	64	87	22	9	2	298	92
Anvik	32	26	21	3	3	0	83	7
Grayling	44	14	20	11	9	8	48	20
Kaltag	58	17	45	10	5	6	73	18
Nulato	91	17	72	15	12	15	233	117
Koyukuk	26	20	13	3	3	1	70	26
Galena	166	42	91	23	13	13	421	260
Ruby	62	20	35	12	12	9	175	145
Huslia	78	18	34	18	16	8	273	135
Hughes	20	17	8	2	3	1	50	21
Allakaket	48	13	33	14	13	12	180	97
Alatna	5	4	2	1	0	0	4	3
Bettles	19	13	10	3	0	0	118	83
District 4	649	221	384	41	90	28	1,728	372
Tanana	97	31	46	15	13	5	225	47
Rampart	17	14	11	2	1	1	17	3
Stevens Village	28	20	7	3	2	2	87	85
Birch Creek	9	8	2	0	0	0	6	0
Beaver	27	19	5	2	0	0	10	3
Fort Yukon	164	55	114	18	24	13	426	185
Venetie	36	33	16	2	4	1	61	3
Chalkyitsik	33	23	19	3	3	2	32	7
District 5	411	203	221	25	46	14	864	209
Survey Totals	2,351	860	1,298	81	181	39	4,467	517

^a Formerly known as Sheldon or Sheldons Point.

Table 3. Household and dog information reported by subsistence and personal use permits issued and returned, listed by fishery and by community of residence, Yukon Area, 2003.^a

Community	Permit Information				Reported Household Information (based on permits issued)					
	Permits		Percent Returned	Numbers of Permits Returned that Fished	Number of People	Number of Fishermen	Number of Households with Dogs	Number of Dogs	Number of Households Feeding Whole Salmon to Dogs	Number of Whole Salmon Fed to Dogs
	Issued	Returned								
Subsistence Use Permits										
Central	3	3	100%	3	7	4	2	6	0	0
Circle	26	19	73%	12	80	33	19	73	12	390
Eagle	51	48	94%	37	117	95	38	271	22	1,224
FNSB ^b	191	179	94%	116	592	367	57	354	19	130
Healy	5	5	100%	3	17	12	4	36	3	1,620
Manley	16	15	94%	8	46	28	12	224	6	2,000
Minto	53	43	81%	18	195	110	22	81	12	81
Nenana	34	33	97%	21	146	95	30	296	21	8,874
Stevens Village ^c	5	4	80%	4	23	10	4	9	1	0
Upper Tanana Villages ^d	43	36	84%	19	155	98	29	116	6	3
Other ^e	13	12	92%	8	39	27	7	76	2	9
Subsistence Permit Subtotal	440	397	90%	249	1,417	879	224	1,542	104	14,331
Personal Use Permits										
FNSB ^f	74	72	97%	35	216	124	-	-	-	-
Personal Use Permit Subtotal	74	72	97%	35	216	124	-	-	-	-
Permit Totals	514	469	91%	284	1,633	1,003	224	1,542	104	14,331

^a As of June 26, 2004.

^b Fairbanks North Star Borough (FNSB) includes residents from the communities of Ester, Fairbanks, North Pole, Salcha, and Two Rivers.

^c Stevens Village is a surveyed village, but many residents fish in permit areas. Therefore this permit information is not included in any final harvest estimate to avoid doublecounting.

^d Upper Tanana Villages include residents from the communities of Delta Junction, Northway, Tanacross, and Tok.

^e In 2003, residents of Anderson, Coldfoot, Denali Park, Eagle River, Lake Minchumina, and Paxson also applied for a subsistence permit.

^f Includes subsistence permits from FNSB, Delta Junction, and Nenana.

Table 4. Estimated number of salmon retained for dog food from subsistence harvests with corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2003. ^a

Community	Total Households	Households Contacted ^b	Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
			Estimated	CI(95%)	Estimated	CI(95%)	Estimated	CI(95%)	Estimated
			Total	(+/-)	Total	(+/-)	Total	(+/-)	Total
Hooper Bay	197	56	0	0	0	0	0	0	0
Scammon Bay	81	26	0	0	0	0	0	0	0
Coastal District	278	82	0	0	0	0	0	0	0
Nunam Iqua ^c	35	22	11	8	0	0	0	0	11
Alakanuk	126	26	0	0	0	0	0	0	0
Emmonak	159	58	6	6	0	0	0	0	6
Kotlik	89	31	97	51	0	0	38	20	135
District 1	409	137	115	52	0	0	38	20	152
Mountain Village	147	45	0	0	0	0	58	98	58
Pitkas Point	25	11	0	0	0	0	0	0	0
St. Mary's	112	40	267	240	0	0	0	0	267
Pilot Station	97	42	249	290	0	0	0	0	249
Marshall	75	22	120	60	0	0	0	0	120
District 2	456	160	635	382	0	0	58	98	694
Russian Mission	61	18	0	0	0	0	0	0	0
Holy Cross	55	20	0	0	0	0	0	0	0
Shageluk	32	25	3,650	410	0	0	0	0	3,650
District 3	148	63	3,650	410	0	0	0	0	3,650
Anvik	32	26	750	0	0	0	0	0	750
Grayling	44	14	459	736	55	80	0	0	514
Kaltag	58	17	700	0	165	141	0	0	865
Nulato	91	17	0	0	0	0	511	898	511
Koyukuk	26	20	1,214	97	676	26	1,148	250	3,038
Galena	166	42	218	360	447	635	489	833	1,154
Ruby	62	19	3,174	4,499	680	240	648	0	4,502
Huslia	78	18	4,525	3,491	1,750	2,079	375	424	6,650
Hughes	20	18	1,180	0	250	0	0	0	1,430
Allakaket	48	13	3,428	2,631	95	0	100	175	3,623
Alatna	5	4	0	0	0	0	0	0	0
Bettles	19	13	0	0	0	0	0	0	0
District 4	649	221	15,648	6,327	4,118	2,193	3,271	1,332	23,037
Tanana	97	33	1,096	405	12,385	2,010	2,790	0	16,271
Rampart	17	13	0	0	35	31	0	0	35
Stevens Village	28	19	0	0	857	1,084	0	0	857
Birch Creek	9	8	0	0	0	0	0	0	0
Beaver	27	19	0	0	0	0	0	0	0
Fort Yukon	164	56	2,172	3,623	4,972	2,360	72	121	7,216
Venetie	36	33	0	0	694	77	0	0	694
Chalkyitsik	33	23	0	0	324	282	0	0	324
District 5	411	204	3,268	3,645	19,267	3,297	2,862	121	25,397
Survey Totals	2,351	867	23,316	7,323	23,385	3,959	6,229	1,341	52,930

^a Does not include an undetermined amount of chinook salmon not fit for human consumption but possibly fed to dogs.

^b The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species.

^c Formerly known as Sheldon or Sheldons Point.

Table 5. Estimated number of salmon retained for dog food from commercial harvests with corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2003.

Community	Total Households	Households Contacted	Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
			Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total
Hooper Bay	197	56	0	0	0	0	0	0	0
Scammon Bay	81	26	0	0	0	0	0	0	0
Coastal District	278	82	0	0	0	0	0	0	0
Nunam Iqua ^a	35	22	0	0	0	0	0	0	0
Alakanuk	126	26	0	0	0	0	0	0	0
Emmonak	159	58	0	0	0	0	0	0	0
Kotlik	89	31	0	0	0	0	0	0	0
District 1	409	137	0	0	0	0	0	0	0
Mountain Village	147	45	0	0	0	0	0	0	0
Pitkas Point	25	11	0	0	0	0	0	0	0
St. Mary's	112	40	0	0	0	0	0	0	0
Pilot Station	97	42	0	0	0	0	0	0	0
Marshall	75	22	0	0	0	0	0	0	0
District 2	456	160	0	0	0	0	0	0	0
Russian Mission	61	18	0	0	0	0	0	0	0
Holy Cross	55	20	0	0	0	0	0	0	0
Shageluk	32	25	0	0	0	0	0	0	0
District 3	148	63	0	0	0	0	0	0	0
Anvik	32	26	0	0	0	0	0	0	0
Grayling	44	14	0	0	0	0	0	0	0
Kaltag	58	17	0	0	0	0	0	0	0
Nulato	91	17	0	0	0	0	0	0	0
Koyukuk	26	20	0	0	0	0	0	0	0
Galena	166	41	0	0	0	0	0	0	0
Ruby	62	18	0	0	0	0	0	0	0
Huslia	78	18	0	0	0	0	0	0	0
Hughes	20	18	0	0	0	0	0	0	0
Allakaket	48	13	0	0	0	0	0	0	0
Alatna	5	4	0	0	0	0	0	0	0
Bettles	19	13	0	0	0	0	0	0	0
District 4	649	219	0	0	0	0	0	0	0
Tanana	97	33	0	0	0	0	0	0	0
Rampart	17	13	0	0	0	0	0	0	0
Stevens Village	28	19	0	0	0	0	0	0	0
Birch Creek	9	8	0	0	0	0	0	0	0
Beaver	27	19	0	0	0	0	0	0	0
Fort Yukon	164	56	0	0	0	0	0	0	0
Venetie	36	33	0	0	0	0	0	0	0
Chalkyitsik	33	23	0	0	0	0	0	0	0
District 5	411	204	0	0	0	0	0	0	0
Survey Totals	2,351	865	0	0	0	0	0	0	0

^a Formerly known as Sheldon or Sheldons Point.

Table 6. Estimated total number of households, the sample size, the number contacted, and the percentage of the sampled households that were contacted in surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003.^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Community Totals			
	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C
Hooper Bay	0	0	0	-	83	25	17	68%	90	27	23	85%	24	24	22	92%	0	0	0	-	197	76	62	82%
Scammon Bay	0	0	0	-	26	8	8	100%	47	14	16	114%	8	8	8	100%	0	0	0	-	81	30	32	107%
Coastal District	0	0	0	-	109	33	25	76%	137	41	39	95%	32	32	30	94%	0	0	0	0%	278	106	94	89%
Nunam Iqua ^b	4	4	3	75%	10	10	3	30%	13	13	10	77%	8	8	7	88%	0	0	0	-	35	35	23	66%
Alakanuk	0	0	0	-	45	14	9	64%	70	21	14	67%	11	11	7	64%	0	0	0	-	126	46	30	65%
Emmonak	0	0	0	-	78	23	18	78%	59	30	25	83%	22	22	18	82%	0	0	0	-	159	75	61	81%
Kotlik	0	0	0	-	26	8	7	88%	48	14	10	71%	14	14	13	93%	1	1	1	100%	89	37	31	84%
District 1	4	4	3	75%	159	55	37	67%	190	78	59	76%	55	55	45	82%	1	1	1	100%	409	193	145	75%
Mountain Village	1	1	1	100%	46	14	10	71%	85	26	22	85%	15	15	14	93%	0	0	0	-	147	56	47	84%
Pitkas Point	0	0	0	-	6	6	4	67%	13	13	8	62%	6	6	5	83%	0	0	0	-	25	25	17	68%
St. Mary's	1	1	1	100%	35	11	7	64%	52	16	16	100%	24	24	23	96%	0	0	0	-	112	52	47	90%
Pilot Station	0	0	0	-	41	12	12	100%	41	21	20	95%	14	14	11	79%	1	1	1	100%	97	48	44	92%
Marshall	0	0	0	-	18	5	3	60%	45	14	11	79%	12	12	11	92%	0	0	0	-	75	31	25	81%
District 2	2	2	2	100%	146	48	36	75%	236	90	77	86%	71	71	64	90%	1	1	1	100%	456	212	180	85%
Russian Mission	0	0	0	-	20	6	5	83%	39	12	11	92%	2	2	2	100%	0	0	0	-	61	20	18	90%
Holy Cross	0	0	0	-	17	5	2	40%	32	16	13	81%	6	6	6	100%	0	0	0	-	55	27	21	78%
Shageluk	1	1	0	0%	14	14	11	79%	12	12	10	83%	4	4	4	100%	1	1	1	100%	32	32	26	81%
District 3	1	1	0	0%	51	25	18	72%	83	40	34	85%	12	12	12	100%	1	1	1	100%	148	79	65	82%
Anvik	0	0	0	-	16	16	12	75%	12	12	10	83%	4	4	4	100%	0	0	0	-	32	32	26	81%
Grayling	0	0	0	-	11	5	5	100%	30	9	7	78%	3	3	2	67%	0	0	0	-	44	17	14	82%
Kaitag	0	0	0	-	15	5	4	80%	41	12	12	100%	2	2	1	50%	0	0	0	-	58	19	17	89%
Nulato	1	1	0	0%	42	13	7	54%	46	14	10	71%	2	2	2	100%	0	0	0	-	91	30	19	63%
Koyukuk	0	0	0	-	12	12	8	67%	11	11	9	82%	2	2	2	100%	1	1	1	100%	26	26	20	77%
Galena	2	2	0	0%	105	32	26	81%	53	16	13	81%	5	5	4	80%	1	1	0	0%	166	56	43	77%
Ruby	0	0	0	-	43	13	11	85%	15	5	5	100%	2	2	1	50%	2	2	2	100%	62	22	19	86%
Huslia	0	0	0	-	49	14	8	57%	25	8	7	88%	3	3	2	67%	1	1	1	100%	78	26	18	69%
Hughes	0	0	0	-	9	9	8	89%	7	7	6	86%	4	4	4	100%	0	0	0	-	20	20	18	90%
Allakaket	0	0	0	-	29	9	6	67%	15	5	4	80%	2	2	2	100%	2	2	2	100%	48	18	14	78%
Alatna	0	0	0	-	4	4	3	75%	1	1	1	100%	0	0	0	-	0	0	0	-	5	5	4	80%
Bettles	0	0	0	-	19	19	13	68%	0	0	0	-	0	0	0	-	0	0	0	-	19	19	13	68%
District 4	3	3	0	0%	354	151	111	74%	256	100	84	84%	29	29	24	83%	7	7	6	86%	649	290	225	78%
Tanana	0	0	0	-	65	20	16	80%	21	11	8	73%	4	4	3	75%	7	7	7	100%	97	42	34	81%
Rampart	1	1	1	100%	5	5	4	80%	7	7	6	86%	3	3	3	100%	1	1	0	0%	17	17	14	82%
Stevens Village	2	2	2	100%	12	12	7	58%	10	10	9	90%	4	4	3	75%	0	0	0	-	28	28	21	75%
Birch Creek	1	1	0	0%	6	6	6	100%	2	2	2	100%	0	0	0	-	0	0	0	-	9	9	8	89%
Beaver	2	2	2	100%	11	11	6	55%	12	12	10	83%	2	2	1	50%	0	0	0	-	27	27	19	70%
Fort Yukon	4	4	3	75%	105	32	29	91%	43	13	12	92%	10	10	10	10%	2	2	2	100%	164	61	56	92%
Venetie	3	3	3	100%	21	21	20	95%	10	10	9	90%	1	1	1	100%	1	1	1	100%	36	36	34	94%
Chalkyitsik	2	2	0	0%	26	26	20	77%	5	5	5	100%	0	0	0	-	0	0	0	-	33	33	25	76%
District 5	15	15	11	73%	251	133	108	81%	110	70	61	87%	24	24	21	88%	11	11	10	91%	411	253	211	83%
Survey Totals	25	25	16	64%	1,070	445	335	75%	1,012	419	354	85%	223	223	196	88%	21	21	19	90%	2,351	1,133	920	81%

^a Total number of households (N), the sample size (n), the number of households contacted (C), and the percent of the sampled households that were contacted (%C). Note: Households contacted (C) may include some households not pre-selected resulting in a household contacted percentage (%C) greater than 100%.

^b Formerly known as Sheldon or Sheldons Point.

Table 7. Estimated number of subsistence fishing households in surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003. ^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total	n	Total	Est CI(95%) (+/-)
Hooper Bay	0	0	-	-	83	17	0.8	0.1	90	23	0.7	0.1	24	22	0.7	0.0	0	0	-	-	197	62	140	22
Scammon Bay	0	0	-	-	26	8	0.5	0.2	47	16	0.6	0.1	8	8	1.0	0.0	0	0	-	-	81	32	50	12
Coastal District	0	0	0.0	0.0	109	25	0.7	0.1	137	39	0.6	0.1	32	30	0.8	0.0	0	0	0.0	0.0	278	94	190	25
Nunam Iqua ^b	4	3	1.0	0.0	10	3	0.3	0.3	13	10	0.8	0.1	8	7	1.0	0.0	0	0	-	-	35	23	26	6
Alakanuk	0	0	-	-	45	9	0.6	0.2	70	14	0.6	0.1	11	7	0.8	0.1	0	0	-	-	126	30	78	21
Emmonak	0	0	-	-	78	18	0.3	0.1	59	25	0.6	0.1	22	18	0.8	0.0	0	0	-	-	159	61	76	18
Kotlik	0	0	-	-	26	7	0.3	0.2	48	10	0.7	0.1	14	13	0.8	0.0	1	1	1.0	-	89	31	54	15
District 1	4	3	1.0	0.0	159	37	0.4	0.1	190	59	0.6	0.1	55	45	0.8	0.0	1	1	1.0	0.0	409	145	234	32
Mountain Village	1	1	1.0	-	46	10	0.4	0.1	85	22	0.9	0.1	15	14	0.8	0.0	0	0	-	-	147	47	108	16
Pitkas Point	0	0	-	-	6	4	0.3	0.1	13	8	0.6	0.1	6	5	1.0	0.0	0	0	-	-	25	17	15	3
St. Mary's	1	1	1.0	-	35	7	0.4	0.2	52	16	0.8	0.1	24	23	1.0	0.0	0	0	-	-	112	47	81	15
Pilot Station	0	0	-	-	41	12	0.2	0.1	41	20	0.8	0.1	14	11	1.0	0.0	1	1	1.0	-	97	44	53	10
Marshall	0	0	-	-	18	3	0.3	0.3	45	11	0.6	0.1	12	11	0.9	0.0	0	0	-	-	75	25	46	16
District 2	2	2	1.0	0.0	146	36	0.3	0.1	236	77	0.8	0.0	71	64	0.9	0.0	1	1	1.0	0.0	456	180	303	29
Russian Mission	0	0	-	-	20	5	0.6	0.2	39	11	0.7	0.1	2	2	1.0	0.0	0	0	-	-	61	18	42	12
Holy Cross	0	0	-	-	17	2	0.5	0.5	32	13	0.8	0.1	6	6	1.0	0.0	0	0	-	-	55	21	39	17
Shageluk	1	0	-	-	14	11	0.5	0.1	12	10	0.5	0.1	4	4	0.8	0.0	1	1	1.0	-	32	26	18	3
District 3	1	0	0.0	0.0	51	18	0.6	0.2	83	34	0.7	0.1	12	12	0.9	0.0	1	1	1.0	0.0	148	65	99	21
Anvik	0	0	-	-	16	12	0.3	0.1	12	10	0.9	0.0	4	4	1.0	0.0	0	0	-	-	32	26	19	2
Grayling	0	0	-	-	11	5	0.4	0.2	30	7	1.0	0.0	3	2	1.0	0.0	0	0	-	-	44	14	37	4
Kaltag	0	0	-	-	15	4	0.5	0.2	41	12	0.9	0.1	2	1	1.0	-	0	0	-	-	58	17	47	9
Nulato	1	0	-	-	42	7	0.3	0.2	46	10	0.7	0.1	2	2	1.0	0.0	0	0	-	-	91	19	46	18
Koyukuk	0	0	-	-	12	8	0.3	0.1	11	9	0.9	0.0	2	2	1.0	0.0	1	1	1.0	-	26	20	16	2
Galena	2	0	-	-	105	26	0.3	0.1	53	13	0.8	0.1	5	4	1.0	0.0	1	0	-	-	166	43	78	18
Ruby	0	0	-	-	43	11	0.0	0.0	15	5	0.8	0.2	2	1	1.0	-	2	2	1.0	0.0	62	19	16	5
Huslia	0	0	-	-	49	8	0.1	0.1	25	7	0.9	0.1	3	2	1.0	0.0	1	1	1.0	-	78	18	32	12
Hughes	0	0	-	-	9	8	0.0	0.0	7	6	0.3	0.1	4	4	1.0	0.0	0	0	-	-	20	18	6	1
Allakaket	0	0	-	-	29	6	0.3	0.2	15	4	0.5	0.2	2	2	1.0	0.0	2	2	1.0	0.0	48	14	21	13
Aiatna	0	0	-	-	4	3	0.3	0.2	1	1	1.0	-	0	0	-	-	0	0	-	-	5	4	2	1
Bettles	0	0	-	-	19	13	0.0	0.0	0	0	-	-	0	0	-	-	0	0	-	-	19	13	0	0
District 4	3	0	0.0	0.0	354	111	0.2	0.0	256	84	0.8	0.0	29	24	1.0	0.0	7	6	0.9	0.0	649	225	321	34
Tanana	0	0	-	-	65	16	0.2	0.1	21	8	0.8	0.1	4	3	1.0	0.0	7	7	0.9	0.0	97	34	38	12
Rampart	1	1	0.0	-	5	4	0.0	0.0	7	6	0.3	0.1	3	3	1.0	0.0	1	0	-	-	17	14	5	1
Stevens Village	2	2	0.5	0.0	12	7	0.1	0.1	10	9	0.7	0.1	4	3	1.0	0.0	0	0	-	-	28	21	13	2
Birch Creek	1	0	-	-	6	6	0.2	0.0	2	2	1.0	0.0	0	0	-	-	0	0	-	-	9	8	3	0
Beaver	2	2	0.0	0.0	11	6	0.0	0.0	12	10	0.7	0.1	2	1	1.0	-	0	0	-	-	27	19	10	1
Fort Yukon	4	3	0.3	0.2	105	29	0.3	0.1	43	12	0.5	0.1	10	10	0.9	0.0	2	2	1.0	0.0	164	56	70	19
Venetie	3	3	0.3	0.0	21	20	0.1	0.0	10	9	0.3	0.1	1	1	0.0	-	1	1	1.0	-	36	34	7	1
Chalkyitsik	2	0	-	-	26	20	0.1	0.0	5	5	0.6	0.0	0	0	-	-	0	0	-	-	33	25	4	1
District 5	15	11	0.2	0.0	251	108	0.2	0.0	110	61	0.6	0.1	24	21	0.9	0.0	11	10	0.8	0.0	411	211	152	23
Survey Totals	25	16	0.4	0.0	1,070	335	0.3	0.0	1,012	354	0.7	0.0	223	196	0.9	0.0	21	19	0.9	0.0	2,351	920	1,296	68

^a The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%). Dashes indicate indefinable values.^b Formerly known as Sheldon or Sheldons Point.

Table 8. Estimated number of people in households in surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined				
	N	n	mean	SE	N	n	mean	SE	N	n	mean	SE	N	n	mean	SE	N	n	mean	SE	Total	N	n	Total	Est CI(95%) (+/-)
Hooper Bay	0	0	-	-	83	15	5.5	0.6	90	19	4.3	0.5	24	17	7.2	0.5	0	0	-	-	197	51		1,014	131
Scammon Bay	0	0	-	-	26	8	4.0	0.9	47	16	5.7	0.4	8	8	8.5	0.0	0	0	-	-	81	32		439	57
Coastal District	0	0	0.0	0.0	109	23	5.1	0.5	137	35	4.8	0.4	32	25	7.5	0.4	0	0	0.0	0.0	278	83		1,454	143
Nunam Iqua ^b	4	3	4.3	0.4	10	3	4.7	1.5	13	9	5.8	0.5	8	6	6.5	0.4	0	0	-	-	35	21		191	33
Alakanuk	0	0	-	-	45	8	4.0	0.8	70	14	5.3	0.6	11	8	4.9	0.4	0	0	-	-	126	30		604	107
Emmonak	0	0	-	-	78	18	4.0	0.5	59	23	5.3	0.5	22	16	5.1	0.2	0	0	-	-	159	57		738	98
Kotlik	0	0	-	-	26	6	3.7	1.0	48	10	5.8	0.9	14	13	5.7	0.2	1	1	3.0	-	89	30		456	94
District 1	4	3	0.0	0.0	159	35	4.0	0.4	190	56	5.5	0.3	55	43	5.4	0.1	1	1	3.0	0.0	409	138		1,989	176
Mountain Village	1	1	7.0	-	46	10	4.4	0.8	85	21	5.1	0.4	15	14	7.0	0.2	0	0	-	-	147	46		747	104
Pitkas Point	0	0	-	-	6	4	4.0	0.6	13	9	4.0	0.4	6	5	4.8	0.2	0	0	-	-	25	18		105	13
St. Mary's	1	1	1.0	-	35	6	3.7	0.7	52	13	5.5	0.7	24	19	4.9	0.3	0	0	-	-	112	39		532	84
Pilot Station	0	0	-	-	41	11	5.5	0.6	41	20	5.0	0.3	14	10	4.6	0.4	1	1	6.0	-	97	42		503	55
Marshall	0	0	-	-	18	2	4.0	0.9	45	9	4.7	0.5	12	9	3.9	0.3	0	0	-	-	75	20		329	57
District 2	2	2	4.0	0.0	146	33	4.5	0.4	236	72	5.0	0.2	71	57	5.1	0.1	1	1	6.0	0.0	456	165		2,216	156
Russian Mission	0	0	-	-	20	5	4.4	1.0	39	8	4.3	0.5	2	2	8.0	0.0	0	0	-	-	61	15		270	54
Holy Cross	0	0	-	-	17	2	1.5	0.5	32	11	3.3	0.5	6	4	3.0	0.4	0	0	-	-	55	17		148	33
Shageluk	0	0	-	-	14	11	3.4	0.3	12	9	3.7	0.5	4	4	3.5	0.0	1	1	6.0	-	32	25		111	15
District 3	0	0	0.0	0.0	51	18	3.1	0.4	83	28	3.8	0.3	12	10	4.0	0.2	1	1	6.0	0.0	148	57		529	66
Anvik	0	0	-	-	16	11	2.0	0.2	12	9	3.9	0.3	4	4	3.0	0.0	0	0	-	-	32	24		91	11
Grayling	0	0	-	-	11	5	4.0	0.7	30	7	3.4	0.6	3	1	3.0	-	0	0	-	-	44	13		156	38
Kaltag	0	0	-	-	15	3	1.0	0.0	41	12	4.3	0.5	2	1	8.0	-	0	0	-	-	58	16		205	41
Nulato	0	0	-	-	42	7	3.0	0.8	46	9	4.1	0.3	2	1	5.0	-	0	0	-	-	91	17		325	75
Koyukuk	0	0	-	-	12	7	1.6	0.3	11	8	3.3	0.4	2	2	4.0	0.0	1	1	2.0	-	26	18		65	12
Galena	0	0	-	-	105	24	2.8	0.3	53	12	3.7	0.5	5	2	2.5	0.4	0	0	-	-	166	38		496	78
Ruby	0	0	-	-	43	9	2.1	0.3	15	5	3.2	0.9	2	2	3.0	0.0	2	1	3.0	-	62	17		151	37
Huslia	0	0	-	-	50	5	3.4	1.0	24	7	2.6	0.7	3	2	4.0	0.0	1	1	8.0	-	78	15		252	101
Hughes	0	0	-	-	9	6	2.0	0.3	7	6	3.2	0.2	4	4	3.5	0.0	0	0	-	-	20	16		54	6
Allakaket	0	0	-	-	29	6	2.5	0.7	15	4	5.5	1.7	2	2	4.5	0.0	2	2	4.5	0.0	48	14		173	65
Alatna	0	0	-	-	19	12	1.8	0.2	0	0	-	-	0	0	-	-	0	0	-	-	19	12		35	6
Bettles	0	0	-	-	4	3	1.3	0.2	1	1	8.0	-	0	0	-	-	0	0	-	-	5	4		13	1
District 4	0	0	0.0	0.0	355	98	2.6	0.2	255	80	3.8	0.2	29	21	3.7	0.1	6	5	4.2	0.0	649	204		2,015	176
Tanana	0	0	-	-	65	16	2.1	0.3	21	7	2.9	0.6	4	3	2.0	0.5	7	6	3.2	0.3	97	32		228	45
Rampart	1	1	1.0	-	5	4	1.0	0.0	7	5	1.8	0.1	3	3	2.7	0.0	0	0	-	-	17	13		27	1
Stevens Village	2	2	1.5	0.0	12	7	2.1	0.5	10	8	3.5	0.4	4	2	5.5	2.5	0	0	-	-	28	19		86	24
Birch Creek	0	0	-	-	6	6	2.0	0.0	2	2	3.0	0.0	0	0	-	-	0	0	-	-	9	8		18	0
Beaver	2	2	2.0	0.0	11	6	2.0	0.3	12	9	1.7	0.1	2	0	-	-	0	0	-	-	27	17		50	7
Fort Yukon	4	3	2.7	0.4	105	29	3.2	0.3	43	12	2.8	0.3	10	10	3.5	0.0	2	2	3.0	0.0	164	56		503	69
Venetie	3	2	3.0	0.6	21	17	2.1	0.1	9	9	5.1	0.0	1	1	5.0	-	1	0	-	-	36	29		108	5
Chalkyitsik	0	0	-	-	26	20	2.6	0.2	5	5	4.0	0.0	0	0	-	-	0	0	-	-	33	25		86	12
District 5	12	10	2.3	0.2	251	105	2.6	0.2	109	57	2.9	0.2	24	19	3.5	0.5	10	8	3.1	0.3	411	199		1,105	88
Survey Totals	18	15	2.9	0.2	1,071	312	3.3	0.1	1,010	328	4.4	0.1	223	175	5.1	0.1	19	16	3.8	0.1	2,351	846		9,307	344

^a The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).^b Formerly known as Sheldon or Sheldons Point.

Table 9. Subsistence salmon harvest estimates (not including test or commercially retained fish) and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2003.

Community	Total Households	Households Contacted ^a	Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
			Estimated	CI(95%)	Estimated	CI(95%)	Estimated	CI(95%)	Estimated	CI(95%)	Estimated
			Total	(+/-)	Total	(+/-)	Total	(+/-)	Total	(+/-)	Total
Hooper Bay	197	62	722	208	10,658	2,991	40	50	244	270	11,664
Scammon Bay	81	32	1,128	507	3,310	1,288	106	96	48	48	4,592
Coastal District	278	94	1,850	548	13,968	3,257	146	108	292	275	16,256
Nunam Iqua ^b	35	23	925	170	2,561	742	127	45	117	36	3,730
Alakanuk	126	30	1,700	750	5,187	2,353	348	321	193	218	7,428
Emmonak	159	61	2,426	962	6,070	1,585	128	104	43	74	8,667
Kotlik	89	31	907	546	4,082	1,829	289	151	272	92	5,550
District 1	409	145	5,958	1,348	17,900	3,456	892	372	625	251	25,375
Mountain Village	147	47	2,174	579	6,497	2,142	545	651	374	218	9,590
Pitkas Point	25	17	633	253	800	300	49	59	130	158	1,612
St. Mary's	112	47	1,916	402	4,521	1,066	762	452	276	215	7,475
Pilot Station	97	44	2,040	523	2,103	810	0	0	0	0	4,143
Marshall	75	25	2,059	762	792	447	394	217	64	17	3,309
District 2	456	180	8,822	1,190	14,713	2,582	1,750	824	844	345	26,129
Russian Mission	61	18	2,024	700	166	145	615	644	178	156	2,983
Holy Cross	55	21	2,395	835	214	184	9	0	498	744	3,116
Shageluk	32	26	550	129	5,473	952	114	60	35	12	6,172
District 3	148	65	4,969	1,097	5,853	980	738	647	711	760	12,271
Anvik	32	26	1,286	321	844	143	179	98	12	12	2,321
Grayling	44	14	1,613	642	1,072	838	441	337	559	435	3,685
Kaltag	58	17	1,838	557	1,028	427	268	210	440	218	3,574
Nulato	91	19	2,531	2,355	180	194	1,341	1,602	928	812	4,980
Koyukuk	26	20	818	220	1,339	102	835	83	1,155	255	4,147
Galena	166	43	3,112	1,183	289	192	1,510	1,180	1,507	1,630	6,418
Ruby	62	19	631	253	876	461	2,331	523	648	0	4,486
Hustla	78	18	469	167	6,187	4,315	1,786	2,070	375	424	8,817
Hughes	20	18	113	19	1,265	3	497	35	20	0	1,895
Allakaket	48	14	306	318	4,383	3,737	105	17	99	127	4,893
Alatna	5	4	12	4	50	20	0	0	7	0	69
Bettles	19	13	0	0	0	0	0	0	0	0	0
District 4	649	225	12,729	2,830	17,513	5,613	9,293	2,948	5,750	1,953	45,285
Tanana	97	34	5,332	1,757	3,075	1,658	14,308	1,668	3,480	0	26,195
Rampart	17	14	1,411	116	5	2	15	0	0	0	1,431
Stevens Village	28	21	1,121	450	0	0	857	1,084	0	0	1,978
Birch Creek	9	8	78	0	0	0	2	0	0	0	80
Beaver	27	19	1,156	227	7	6	192	111	0	0	1,355
Fort Yukon	164	56	4,002	1,458	2,176	3,622	7,190	2,395	244	253	13,612
Venetie	36	34	125	9	0	0	770	25	11	7	906
Chalkyitsik	33	25	50	0	0	0	340	245	7	1	397
District 5	411	211	13,275	2,341	5,263	3,984	23,674	3,125	3,742	253	45,954
Survey Totals	2,351	920	47,603	4,269	75,210	8,935	36,493	4,440	11,964	2,171	171,270

^a The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species.^b Formerly known as Sheldon or Sheldons Point.

Table 10. Estimated number of salmon used for subsistence purposes and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2003.

Community			Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
	Total	Households	Estimated	CI(95%)	Estimated	CI(95%)	Estimated	CI(95%)	Estimated	CI(95%)	Estimated
	Households	Contacted ^a	Total	(+/-)	Total	(+/-)	Total	(+/-)	Total	(+/-)	Total
Hooper Bay	197	62	805	193	10,423	2,273	36	47	237	270	11,501
Scammon Bay	81	32	1,260	479	3,711	1,267	96	94	100	102	5,167
Coastal District	278	94	2,065	517	14,134	2,602	132	105	337	289	16,668
Nunam Iqua ^b	35	23	878	178	2,034	627	77	41	117	36	3,106
Alakanuk	126	30	1,597	621	5,437	2,245	458	342	253	240	7,745
Emmonak	159	61	2,650	681	8,384	1,791	602	323	307	204	11,943
Kotlik	89	31	1,135	494	4,878	1,690	430	164	323	104	6,766
District 1	409	145	6,260	1,061	20,733	3,390	1,567	500	1,000	334	29,560
Mountain Village	147	47	2,221	686	7,064	1,968	535	620	438	238	10,258
Pitkas Point	25	16	651	220	832	298	41	39	130	154	1,654
St. Mary's	112	47	1,816	337	4,456	1,006	780	414	306	218	7,358
Pilot Station	97	44	2,478	518	2,563	593	12	13	8	12	5,061
Marshall	75	25	2,135	614	826	338	380	213	46	14	3,387
District 2	456	179	9,301	1,131	15,741	2,332	1,748	776	928	358	27,718
Russian Mission	61	18	2,121	652	190	139	261	315	178	156	2,750
Holy Cross	55	21	2,283	704	203	176	9	0	36	37	2,531
Shageluk	32	26	596	116	5,507	931	121	58	35	12	6,259
District 3	148	65	5,000	967	5,900	958	391	320	249	161	11,540
Anvik	32	26	1,321	367	804	17	193	97	162	12	2,480
Grayling	44	14	1,301	621	1,039	838	475	308	469	381	3,284
Kaltag	58	17	1,933	674	820	135	268	210	444	141	3,465
Nulato	91	19	2,480	1,786	180	194	1,065	1,244	1,000	813	4,725
Koyukuk	26	20	628	126	1,356	199	793	58	1,148	250	3,925
Galena	166	43	2,394	378	489	392	1,352	730	837	992	5,072
Ruby	62	20	628	239	3,574	4,515	1,231	523	648	0	6,081
Huslia	78	18	957	591	6,007	4,212	1,786	2,070	447	434	9,197
Hughes	20	18	130	18	1,243	3	595	24	20	0	1,988
Allakaket	48	14	250	196	4,321	3,738	105	17	99	127	4,775
Alatna	5	4	20	3	56	11	0	0	8	1	84
Bettles	19	13	20	10	0	0	4	5	0	0	24
District 4	649	226	12,062	2,184	19,889	7,283	7,867	2,606	5,282	1,441	45,100
Tanana	97	34	4,464	1,480	2,765	1,626	14,396	1,589	3,481	102	25,106
Rampart	17	14	1,249	113	5	2	80	31	1	1	1,335
Stevens Village	28	21	1,147	459	0	0	874	1,081	0	0	2,021
Birch Creek	9	8	48	0	0	0	2	0	0	0	50
Beaver	27	19	843	228	27	6	132	71	0	0	1,002
Fort Yukon	164	56	3,772	1,142	2,133	3,550	7,548	2,384	280	256	13,733
Venetie	36	34	91	28	0	0	801	79	13	7	905
Chalkyitsik	33	25	113	14	0	0	365	245	4	1	482
District 5	411	211	11,727	1,942	4,930	3,905	24,198	3,074	3,779	276	44,634
Survey Totals	2,351	920	46,415	3,485	81,327	9,639	35,903	4,148	11,575	1,582	175,220

^a The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species.^b Formerly known as Sheldon or Sheldons Point.

Table 11. Estimated subsistence harvest of pink salmon, whitefish, pike, and sheefish fish species by surveyed villages, Yukon Area, 2003.

Estimated Subsistence Harvest with Corresponding Confidence Intervals (CI) (Expanded to Estimate Survey Village Harvest)													
Community	Total Households	Households Contacted ^b	Pink Salmon		Large Whitefish ^a		Small Whitefish		Pike		Sheefish		Total Expanded Misc. Fish Harvest
			Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	
Hooper Bay	197	62	473	352	898	849	3,607	1,426	759	601	22	16	5,759
Scammon Bay	81	32	997	826	632	419	2,532	2,358	1,504	770	29	24	5,694
Coastal District	278	94	1,470	897	1,530	947	6,139	2,755	2,263	977	51	29	11,453
Nunam Iqua ^c	35	22	5	3	208	159	1,033	597	54	59	726	276	2,026
Alakanuk	126	30	0	0	1,576	1,130	3,565	3,079	887	546	1,627	1,117	7,655
Emmonak	159	61	4	4	556	335	2,781	2,773	635	321	1,341	540	5,317
Kotlik	89	31	198	285	99	64	745	606	893	932	1,431	556	3,366
District 1	409	144	207	285	2,439	1,191	8,124	4,230	2,469	1,128	5,125	1,387	18,364
Mountain Village	147	47	117	56	1,548	1,089	2,843	1,033	1,753	577	1,313	992	7,574
Pitkas Point	25	17	0	0	395	165	555	618	130	97	168	153	1,248
St. Mary's	112	47	0	0	1,652	1,040	1,926	813	1,528	524	855	338	5,961
Pilot Station	97	44	0	0	477	242	581	238	469	321	333	163	1,860
Marshall	75	25	0	0	134	200	1,265	566	2,630	2,013	546	202	4,575
District 2	456	180	117	56	4,206	1,547	7,170	1,577	6,510	2,185	3,215	1,090	21,218
Russian Mission	61	18	0	0	1,059	893	30	52	547	328	261	267	1,897
Holy Cross	55	21	0	0	340	334	488	346	282	157	66	31	1,176
Shageluk	32	26	130	58	2,007	1,148	30	14	625	175	199	76	2,991
District 3	148	65	130	58	3,406	1,492	548	350	1,454	403	526	279	6,064
Anvik	32	26	240	192	1,058	125	45	19	1,264	58	248	40	2,855
Grayling	44	14	3	3	170	175	781	618	345	193	409	205	1,708
Kaitag	58	17	0	0	565	621	164	148	163	145	120	92	1,012
Nulato	91	19	0	0	253	271	69	120	476	345	198	222	996
Koyukuk	26	20	0	0	401	203	124	40	84	30	131	35	740
Galena	166	43	0	0	6,233	6,262	19	33	418	453	285	279	6,955
Ruby	62	19	0	0	266	94	1,024	0	52	23	153	95	1,495
Huslia	78	18	0	0	2,031	964	1,739	1,302	5,191	5,762	883	362	9,844
Hughes	20	18	0	0	1,255	754	5,070	116	47	0	566	110	6,938
Allakaket	48	14	0	0	918	189	2,564	603	223	21	895	753	4,600
Alatna	5	4	0	0	100	55	0	0	1	0	80	111	181
Bettles	19	13	0	0	0	0	0	0	0	0	0	0	0
District 4	649	225	243	192	13,250	6,427	11,599	1,580	8,264	5,795	3,968	955	37,324
Tanana	97	34	0	0	3,484	346	2,550	286	111	58	856	86	7,001
Rampart	17	14	0	0	2	0	2	0	0	0	0	0	4
Stevens Village	28	21	0	0	400	554	0	0	100	139	10	14	510
Birch Creek	9	8	0	0	160	170	150	170	170	170	150	170	630
Beaver	27	19	0	0	47	39	13	13	31	24	7	7	98
Fort Yukon	164	56	0	0	1,443	1,451	1,532	819	882	651	368	262	4,225
Venetie	36	34	0	0	28	20	0	0	31	27	4	2	63
Chalkyitsik	33	25	0	0	15	18	179	199	56	55	0	0	250
District 5	411	211	0	0	5,579	1,601	4,426	906	1,381	692	1,395	324	12,781
Survey Totals	2,351	919	2,167	964	30,410	7,128	38,006	5,604	22,341	6,421	14,280	2,052	107,204

^a Large whitefish are considered those four pounds or larger and small whitefish are less than four pounds.^b The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species.^c Formerly known as Sheldon or Sheldons Point.

Table 12. Reported subsistence harvest of other miscellaneous fish species by surveyed villages, Yukon Area, 2003.

Community	Reported Harvest of Miscellaneous Fish Species, (Not Expanded)									Total Not Expanded Misc. Fish Harvest
	Total Households	Households Contacted ^a	Burbot	Lamprey	Tomcod	Grayling	Sucker	Arctic Char	Blackfish	
Hooper Bay	197	62	84	0	2,521	0	0	13	18,092	20,710
Scammon Bay	81	32	100	0	490	0	0	0	16,460	17,050
Coastal District	278	94	184	0	3,011	0	0	13	34,552	37,760
Nunam Iqua ^b	35	22	115	1	182	0	0	13	13,412	13,723
Alakanuk	126	30	67	0	70	0	0	0	4,100	4,237
Emmonak	159	61	63	0	775	10	0	0	40,260	41,108
Kotlik	89	31	131	0	570	0	0	12	1,665	2,378
District 1	409	144	376	1	1,597	10	0	25	59,437	61,446
Mountain Village	147	47	187	1,227	0	141	5	5	14,185	15,750
Pitkas Point	25	17	47	1,219	0	10	0	0	13,162	14,438
St. Mary's	112	47	204	937	0	73	0	52	24,012	25,278
Pilot Station	97	44	637	2,842	0	523	0	0	13,485	17,487
Marshall	75	25	193	4,722	0	8	0	8	420	5,351
District 2	456	180	1,268	10,947	0	755	5	65	65,264	78,304
Russian Mission	61	18	81	930	0	1	0	8	2,100	3,120
Holy Cross	55	21	211	987	0	85	0	0	300	1,583
Shageluk	32	26	87	0	0	0	0	0	0	87
District 3	148	65	379	1,917	0	86	0	8	2,400	4,790
Anvik	32	26	21	12,255	0	43	0	0	0	12,319
Grayling	44	14	57	4,766	0	29	0	10	0	4,862
Kaltag	58	17	3	0	0	73	0	31	0	107
Nulato	91	19	9	0	0	264	0	51	0	324
Koyukuk	26	20	16	0	0	0	0	1	0	17
Galena	166	43	279	0	0	32	0	30	50	391
Ruby	62	19	9	0	0	0	1	0	0	10
Huslia	78	18	113	0	0	232	82	100	0	527
Hughes	20	18	7	0	0	94	12	0	0	113
Allakaket	48	14	21	0	0	392	120	0	0	533
Alatna	5	4	0	0	0	20	0	0	0	20
Bettles	19	13	0	0	0	61	0	41	0	102
District 4	649	225	535	17,021	0	1,240	215	264	50	19,325
Tanana	97	34	75	0	0	30	3	1	0	109
Rampart	17	14	0	0	0	40	0	0	0	40
Stevens Village	28	21	4	0	0	0	0	0	0	4
Birch Creek	9	8	4	0	0	0	5	0	0	9
Beaver	27	19	164	0	0	42	6	0	0	212
Fort Yukon	164	56	0	0	0	0	0	0	0	0
Venetie	36	34	0	0	0	178	0	0	0	178
Chalkyitsik	33	25	11	0	0	40	0	0	0	51
District 5	411	211	258	0	0	330	14	1	0	603
Survey Totals	2,351	919	3,000	29,886	4,608	2,421	234	376	161,703	202,228

^a The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species.

^b Formerly known as Sheldon or Sheldons Point.

Table 13. Estimated subsistence harvest (not including test or commercially retained fish) of Chinook salmon by fishing location in surveyed villages, Yukon Area, 2003.^a

COMMUNITY	Coastal District	Districts			Subdistricts								River Drainages				Total by Community
		1	2	3	4A	4B	4C	5A	5B	5C	5D	Innoko	Koyukuk	Chandalar	Porcupine	Black	
Hooper Bay	719	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	722
Scammon Bay	350	778	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,128
Coastal District	1,069	781	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,850
Nunam Iqua ^b	0	925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	925
Alakanuk	0	1,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,700
Emmonak	315	2,111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,426
Kotlik	14	893	0	0	0	0	0	0	0	0	0	0	0	0	0	0	907
District 1	329	5,629	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,958
Mountain Village	0	466	1,708	0	0	0	0	0	0	0	0	0	0	0	0	0	2,174
Pitkas Point	0	0	633	0	0	0	0	0	0	0	0	0	0	0	0	0	633
St. Mary's	0	146	1,770	0	0	0	0	0	0	0	0	0	0	0	0	0	1,916
Pilot Station	0	0	2,040	0	0	0	0	0	0	0	0	0	0	0	0	0	2,040
Marshall	0	0	2,059	0	0	0	0	0	0	0	0	0	0	0	0	0	2,059
District 2	0	612	8,210	0	0	0	0	0	0	0	0	0	0	0	0	0	8,822
Russian Mission	0	0	584	1,440	0	0	0	0	0	0	0	0	0	0	0	0	2,024
Holy Cross	0	0	0	2,395	0	0	0	0	0	0	0	0	0	0	0	0	2,395
Shageluk	0	0	0	284	137	0	0	0	0	0	0	129	0	0	0	0	550
District 3	0	0	584	4,119	137	0	0	0	0	0	0	129	0	0	0	0	4,969
Anvik	0	0	0	0	1,286	0	0	0	0	0	0	0	0	0	0	0	1,286
Grayling	0	0	0	0	1,613	0	0	0	0	0	0	0	0	0	0	0	1,613
Kaltag	0	0	0	0	1,838	0	0	0	0	0	0	0	0	0	0	0	1,838
Nulato	0	0	0	0	2,531	0	0	0	0	0	0	0	0	0	0	0	2,531
Koyukuk	0	0	0	0	783	35	0	0	0	0	0	0	0	0	0	0	818
Galena	0	0	0	0	1,842	850	420	0	0	0	0	0	0	0	0	0	3,112
Ruby	0	0	0	0	0	151	480	0	0	0	0	0	0	0	0	0	631
Huslia	0	0	0	0	30	0	0	0	0	0	0	0	439	0	0	0	469
Hughes	0	0	0	0	0	0	0	0	0	0	0	0	113	0	0	0	113
Allakaket	0	0	0	0	0	0	0	0	0	0	0	0	306	0	0	0	306
Alatna	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	12
Bettles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
District 4	0	0	0	0	9,923	1,036	900	0	0	0	0	0	870	0	0	0	12,729
Tanana	0	0	0	0	0	0	0	641	4,685	6	0	0	0	0	0	0	5,332
Rampart	0	0	0	0	0	0	0	0	0	1,411	0	0	0	0	0	0	1,411
Stevens Village	0	0	0	0	0	0	0	0	0	686	435	0	0	0	0	0	1,121
Birch Creek	0	0	0	0	0	0	0	0	0	0	78	0	0	0	0	0	78
Beaver	0	0	0	0	0	0	0	0	0	0	1,156	0	0	0	0	0	1,156
Fort Yukon	0	0	0	0	0	0	0	0	0	0	4,002	0	0	0	0	0	4,002
Venetie	0	0	0	0	0	0	0	0	0	0	71	0	0	54	0	0	125
Chalkyitsik	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	35	50
District 5	0	0	0	0	0	0	0	641	4,685	2,103	5,757	0	0	54	0	35	13,275
Survey Totals	1,398	7,022	8,794	4,119	10,060	1,036	900	641	4,685	2,103	5,757	129	870	54	0	35	47,603

^a Totals may not appear to be correct due to decimal rounding.^b Formerly known as Sheldon or Sheldons Point.

Table 14. Estimated subsistence harvest (not including test or commercially retained fish) of summer chum salmon by fishing location in surveyed villages, Yukon Area, 2003.^a

COMMUNITY	Coastal District	Districts			Subdistricts								River Drainages					Total by Community
		1	2	3	4A	4B	4C	5A	5B	5C	5D	Innoko	Koyukuk	Chandalar	Porcupine	Black		
Hooper Bay	10,597	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,658	
Scammon Bay	1,384	1,926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,310	
Coastal District	11,981	1,987	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,968	
Nunam Iqua ^b	0	2,561	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,561	
Alakanuk	0	5,187	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,187	
Emmonak	46	6,024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,070	
Kotlik	19	4,063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,082	
District 1	65	17,835	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17,900	
Mountain Village	0	1,150	5,347	0	0	0	0	0	0	0	0	0	0	0	0	0	6,497	
Pitkas Point	0	0	800	0	0	0	0	0	0	0	0	0	0	0	0	0	800	
St. Mary's	0	667	3,854	0	0	0	0	0	0	0	0	0	0	0	0	0	4,521	
Pilot Station	0	0	2,103	0	0	0	0	0	0	0	0	0	0	0	0	0	2,103	
Marshall	0	0	792	0	0	0	0	0	0	0	0	0	0	0	0	0	792	
District 2	0	1,817	12,896	0	0	0	0	0	0	0	0	0	0	0	0	0	14,713	
Russian Mission	0	0	5	161	0	0	0	0	0	0	0	0	0	0	0	0	166	
Holy Cross	0	0	0	214	0	0	0	0	0	0	0	0	0	0	0	0	214	
Shageluk	0	0	0	5,364	109	0	0	0	0	0	0	0	0	0	0	0	5,473	
District 3	0	0	5	5,739	109	0	0	0	0	0	0	0	0	0	0	0	5,853	
Anvik	0	0	0	0	844	0	0	0	0	0	0	0	0	0	0	0	844	
Grayling	0	0	0	0	1,072	0	0	0	0	0	0	0	0	0	0	0	1,072	
Kaltag	0	0	0	0	1,028	0	0	0	0	0	0	0	0	0	0	0	1,028	
Nulato	0	0	0	0	180	0	0	0	0	0	0	0	0	0	0	0	180	
Koyukuk	0	0	0	0	1,339	0	0	0	0	0	0	0	0	0	0	0	1,339	
Galena	0	0	0	0	221	56	12	0	0	0	0	0	0	0	0	0	289	
Ruby	0	0	0	0	0	0	876	0	0	0	0	0	0	0	0	0	876	
Huslia	0	0	0	0	13	0	0	0	0	0	0	0	6,174	0	0	0	6,187	
Hughes	0	0	0	0	0	0	0	0	0	0	0	0	1,265	0	0	0	1,265	
Allakaket	0	0	0	0	0	0	0	0	0	0	0	0	4,383	0	0	0	4,383	
Alatna	0	0	0	0	0	0	0	0	0	0	0	0	50	0	0	0	50	
Bettles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
District 4	0	0	0	0	4,697	56	888	0	0	0	0	0	11,872	0	0	0	17,513	
Tanana	0	0	0	0	0	0	0	1,490	1,585	0	0	0	0	0	0	0	3,075	
Rampart	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	
Stevens Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Birch Creek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Beaver	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	
Fort Yukon	0	0	0	0	0	0	0	0	0	0	2,176	0	0	0	0	0	2,176	
Venetie	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chalkyitsik	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
District 5	0	0	0	0	0	0	0	1,490	1,585	5	2,183	0	0	0	0	0	5,263	
Survey Totals	12,046	21,639	12,901	5,739	4,806	56	888	1,490	1,585	5	2,183	0	11,872	0	0	0	75,210	

^a Totals may not appear to be correct due to decimal rounding.^b Formerly known as Sheldon or Sheldons Point.

Table 15. Estimated subsistence harvest (not including test or commercially retained fish) of fall chum salmon by fishing location in surveyed villages, Yukon Area, 2003.^a

COMMUNITY	Coastal District	Districts			Subdistricts							River Drainages					Total by Community
		1	2	3	4A	4B	4C	5A	5B	5C	5D	Innoko	Koyukuk	Chandalar	Porcupine	Black	
Hooper Bay	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Scammon Bay	92	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106
Coastal District	132	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146
Nunam Iqua ^b	0	127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	127
Alakanuk	0	348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	348
Emmonak	23	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128
Kotlik	0	289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	289
District 1	23	869	0	0	0	0	0	0	0	0	0	0	0	0	0	0	892
Mountain Village	0	8	537	0	0	0	0	0	0	0	0	0	0	0	0	0	545
Pitkas Point	0	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	49
St. Mary's	0	2	760	0	0	0	0	0	0	0	0	0	0	0	0	0	762
Pilot Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marshall	0	0	394	0	0	0	0	0	0	0	0	0	0	0	0	0	394
District 2	0	10	1,740	0	0	0	0	0	0	0	0	0	0	0	0	0	1,750
Russian Mission	0	0	490	125	0	0	0	0	0	0	0	0	0	0	0	0	615
Holy Cross	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
Shageluk	0	0	0	107	6	0	0	0	0	0	0	1	0	0	0	0	114
District 3	0	0	490	241	6	0	0	0	0	0	0	1	0	0	0	0	738
Anvik	0	0	0	0	179	0	0	0	0	0	0	0	0	0	0	0	179
Grayling	0	0	0	0	441	0	0	0	0	0	0	0	0	0	0	0	441
Kaltag	0	0	0	0	268	0	0	0	0	0	0	0	0	0	0	0	268
Nulato	0	0	0	0	1,341	0	0	0	0	0	0	0	0	0	0	0	1,341
Koyukuk	0	0	0	0	668	64	0	0	0	0	0	0	103	0	0	0	835
Galena	0	0	0	0	895	615	0	0	0	0	0	0	0	0	0	0	1,510
Ruby	0	0	0	0	0	0	2,331	0	0	0	0	0	0	0	0	0	2,331
Huslia	0	0	0	0	0	0	0	0	0	0	0	0	1,786	0	0	0	1,786
Hughes	0	0	0	0	0	0	0	0	0	0	0	0	497	0	0	0	497
Allakaket	0	0	0	0	0	0	0	0	0	0	0	0	105	0	0	0	105
Alatna	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bettles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
District 4	0	0	0	0	3,792	679	2,331	0	0	0	0	0	2,491	0	0	0	9,293
Tanana	0	0	0	0	0	0	0	247	14,061	0	0	0	0	0	0	0	14,308
Rampart	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15
Stevens Village	0	0	0	0	0	0	0	0	0	857	0	0	0	0	0	0	857
Birch Creek	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Beaver	0	0	0	0	0	0	0	0	0	0	192	0	0	0	0	0	192
Fort Yukon	0	0	0	0	0	0	0	0	0	0	7,082	0	0	108	0	0	7,190
Venetie	0	0	0	0	0	0	0	0	0	0	82	0	0	688	0	0	770
Chalkyitsik	0	0	0	0	0	0	0	0	0	0	4	0	10	0	0	326	340
District 5	0	0	0	0	0	0	0	247	14,061	872	7,362	0	10	796	0	326	23,674
Survey Totals	155	893	2,230	241	3,798	679	2,331	247	14,061	872	7,362	1	2,501	796	0	326	36,493

^a Totals may not appear to be correct due to decimal rounding.^b Formerly known as Sheldon or Sheldons Point.

Table 16. Estimated subsistence harvest (not including test or commercially retained fish) of coho salmon by fishing location in surveyed villages, Yukon Area, 2003. ^a

COMMUNITY	Coastal District	Districts			Subdistricts							River Drainages					Total by Community
		1	2	3	4A	4B	4C	5A	5B	5C	5D	Innoko	Koyukuk	Chandalar	Porcupine	Black	
Hooper Bay	244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	244
Scammon Bay	43	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Coastal District	287	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	292
Nunam Iqua ^b	0	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	117
Alakanuk	0	193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	193
Emmonak	0	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Kotlik	0	272	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272
District 1	0	625	0	0	0	0	0	0	0	0	0	0	0	0	0	0	625
Mountain Village	0	3	371	0	0	0	0	0	0	0	0	0	0	0	0	0	374
Pitkas Point	0	0	130	0	0	0	0	0	0	0	0	0	0	0	0	0	130
St. Mary's	0	0	276	0	0	0	0	0	0	0	0	0	0	0	0	0	276
Pilot Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marshall	0	0	64	0	0	0	0	0	0	0	0	0	0	0	0	0	64
District 2	0	3	841	0	0	0	0	0	0	0	0	0	0	0	0	0	844
Russian Mission	0	0	73	105	0	0	0	0	0	0	0	0	0	0	0	0	178
Holy Cross	0	0	0	498	0	0	0	0	0	0	0	0	0	0	0	0	498
Shageluk	0	0	0	18	0	0	0	0	0	0	0	17	0	0	0	0	35
District 3	0	0	73	621	0	0	0	0	0	0	0	17	0	0	0	0	711
Anvik	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12
Grayling	0	0	0	0	559	0	0	0	0	0	0	0	0	0	0	0	559
Kaltag	0	0	0	0	440	0	0	0	0	0	0	0	0	0	0	0	440
Nulato	0	0	0	0	928	0	0	0	0	0	0	0	0	0	0	0	928
Koyukuk	0	0	0	0	1,155	0	0	0	0	0	0	0	0	0	0	0	1,155
Galena	0	0	0	0	1,019	488	0	0	0	0	0	0	0	0	0	0	1,507
Ruby	0	0	0	0	0	0	648	0	0	0	0	0	0	0	0	0	648
Huslia	0	0	0	0	0	0	0	0	0	0	0	0	375	0	0	0	375
Hughes	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	20
Allakaket	0	0	0	0	0	0	0	0	0	0	0	0	99	0	0	0	99
Alatna	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7
Bettles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
District 4	0	0	0	0	4,113	488	648	0	0	0	0	0	501	0	0	0	5,750
Tanana	0	0	0	0	0	0	0	114	3,366	0	0	0	0	0	0	0	3,480
Rampart	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stevens Village	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Birch Creek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beaver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fort Yukon	0	0	0	0	0	0	0	0	0	0	244	0	0	0	0	0	244
Venetie	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	11
Chalkyitsik	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	3	7
District 5	0	0	0	0	0	0	0	114	3,366	0	248	0	0	11	0	3	3,742
Survey Totals	287	633	914	621	4,113	488	648	114	3,366	0	248	17	501	11	0	3	11,964

^a Totals may not appear to be correct due to decimal rounding.^b Formerly known as Sheldon or Sheldons Point.

Table 17. Households' response to survey question estimating percent success of subsistence salmon needs met, by community, by species, Yukon Area, 2003

Community	Percent Success In Meeting Subsistence Needs By Community, By Species ^a											
	Chinook Salmon			Summer Chum Salmon			Fall Chum Salmon			Coho Salmon		
	Number of Households Responses	Greater Than 50%	Equal to or Less Than 50%	Number of Households Responses	Greater Than 50%	Equal to or Less Than 50%	Number of Households Responses	Greater Than 50%	Equal to or Less Than 50%	Number of Households Responses	Greater Than 50%	Equal to or Less Than 50%
Hooper Bay	56	39%	61%	52	46%	54%	3	100%	0%	3	67%	33%
Scammon Bay	27	52%	48%	27	56%	44%	2	0%	100%	2	0%	100%
Coastal District	83	43%	57%	79	49%	51%	5	60%	40%	5	40%	60%
Nunam Iqua ^b	17	59%	41%	18	50%	50%	8	38%	63%	8	38%	63%
Alakanuk	24	63%	38%	23	65%	35%	1	100%	0%	1	100%	0%
Emmonak	40	73%	28%	39	74%	26%	8	88%	13%	5	100%	0%
Kotlik	27	59%	41%	26	69%	31%	13	62%	38%	11	64%	36%
District 1	108	65%	35%	106	67%	33%	30	63%	37%	25	64%	36%
Mountain Village	40	58%	43%	41	54%	46%	15	73%	27%	13	69%	31%
Pitkas Point	12	58%	42%	12	42%	58%	2	50%	50%	1	0%	100%
St. Mary's	33	82%	18%	29	83%	17%	5	80%	20%	4	75%	25%
Pilot Station	34	65%	35%	31	68%	32%	0	-	-	0	-	-
Marshall	18	83%	17%	10	90%	10%	7	71%	29%	7	100%	0%
District 2	137	69%	31%	123	66%	34%	29	72%	28%	25	76%	24%
Russian Mission	14	71%	29%	7	43%	57%	3	33%	67%	2	0%	100%
Holy Cross	16	88%	13%	1	0%	100%	0	-	-	0	-	-
Shageluk	18	78%	22%	14	86%	14%	4	50%	50%	4	75%	25%
District 3	48	79%	21%	22	68%	32%	7	43%	57%	6	50%	50%
Anvik	17	76%	24%	9	56%	44%	5	60%	40%	2	50%	50%
Grayling	12	75%	25%	7	57%	43%	4	50%	50%	5	60%	40%
Kaitag	17	82%	18%	4	100%	0%	6	100%	0%	5	100%	0%
Nulato	13	62%	38%	9	78%	22%	9	67%	33%	8	75%	25%
Koyukuk	15	93%	7%	4	100%	0%	6	67%	33%	3	67%	33%
Galena	34	79%	21%	9	78%	22%	17	71%	29%	10	70%	30%
Ruby	7	71%	29%	5	80%	20%	4	100%	0%	1	100%	0%
Huslia	9	22%	78%	6	67%	33%	3	100%	0%	0	-	-
Hughes	6	67%	33%	4	75%	25%	4	50%	50%	2	50%	50%
Allakaket	9	56%	44%	9	56%	44%	7	43%	57%	7	43%	57%
Alatna	2	0%	100%	2	0%	100%	1	0%	100%	1	0%	100%
Bettles	2	50%	50%	1	100%	0%	1	100%	0%	1	100%	0%
District 4	143	71%	29%	69	70%	30%	67	69%	31%	45	67%	33%
Tanana	22	73%	27%	10	70%	30%	9	89%	11%	3	100%	0%
Rampart	9	100%	0%	2	100%	0%	3	100%	0%	2	50%	50%
Stevens Village	8	75%	25%	0	-	-	0	-	-	0	-	-
Birch Creek	3	33%	67%	0	-	-	0	-	-	0	-	-
Beaver	9	100%	0%	3	100%	0%	1	100%	0%	0	-	-
Fort Yukon	48	56%	44%	7	43%	57%	20	70%	30%	4	50%	50%
Venetie	3	33%	67%	0	-	-	5	40%	60%	1	0%	100%
Chalkyitsik	18	39%	61%	0	-	-	5	60%	40%	0	-	-
District 5	120	63%	37%	22	68%	32%	43	72%	28%	10	60%	40%
Survey Totals	639	65%	35%	421	64%	36%	181	68%	32%	116	66%	34%

^a Prior to 2003 survey headings for each salmon species were categorized as either (very good or average) and (very poor). In 2003 the survey asked whether 100%, 75%, 50%, or 25% of harvest needs were met for each salmon species. The table categories combines fishermen responses of 100% and 75% as (greater than 50%) and those fishermen responses indicated 50% and 25% as (less than 50%). In those cases where households had indicated on survey forms a percent success other than 100, 75, 50, 25, the closest percent rounded up was used.

^b Formerly known as Sheldon or Sheldons Point.

Table 18. Reported subsistence and personal use fish harvested under the authority of a permit, listed by permit area, Yukon Area, 2003. ^a

Permit Fishing Area	Permit ^b			Percent Returned	Number of Permits Returned that Fished	Reported Harvest									
	Type	Issued	Returned			Chinook	Summer Chum	Fall Chum	Coho	Whitefish	Sheefish	Burbot	Pike	Suckers	Grayling
Subsistence Use															
Yukon River near Haul Road Bridge	SY	86	80	93%	62	2,670	89	104	145	557	62	32	47	7	0
Yukon River near Circle and Eagle	SE	95	85	89%	58	3,406	189	3,374	0	584	29	2	13	107	1,197
Tanana River Subdistrict 6A	SA	18	16	89%	9	213	65	1,396	1,006	3	2	0	35	3	0
Tanana River Subdistrict 6B	SB	77	72	94%	40	1,839	2,849	10,537	7,849	875	45	37	162	44	5
Tanana River Upstream of Subdistrict 6C	SU	38	32	84%	17	30	0	4	0	1,482	0	14	10	33	5
Kantishna River Subdistrict 6A	SK	5	5	100%	4	63	0	1,049	1,508	37	1	8	23	49	6
Tolovana River Pike Subdistrict 6B	ST	119	105	88%	57	0	0	0	0	334	63	24	966	88	0
Whitefish/ Sucker	SW	2	2	100%	2	0	0	0	0	506	0	0	0	490	3
Subsistence Permit Subtotals		440	397	90%	249	8,221	3,192	16,464	10,508	4,378	202	117	1,256	821	1,216
Personal Use															
Tanana River Subdistrict 6C	PC	67	67	100%	32	204	148	394	549	2	1	0	0	0	0
Tanana River Whitefish Upstream of Subdistrict 6C	PW	7	5	71%	3	0	0	0	0	20	0	5	0	135	7
Personal Use Permit Subtotals		74	72	97%	35	204	148	394	549	22	1	5	0	135	7
Permit Totals		514	469	91%	284 ^c	8,425	3,340	16,858	11,057	4,400	203	122	1,256	956	1,223

^a As of June 26, 2004.^b Includes 34 households that were issued permits for more than one area.^c Includes 5 households that fished in two different permit areas.

Table 19. Reported subsistence and personal use fish harvested under the authority of a permit, listed by fishery, by community of residence, and by drainage, Yukon Area, 2003. ^a

Community	Harvest by Drainage	Permits		Percent Returned	Number of Permits Returned that Fished	Reported Harvest									
		Issued	Returned			Chinook	Summer Chum	Fall Chum	Coho	Whitefish	Sheefish	Burbot	Pike	Sucker	Grayling
Subsistence Use Permit															
Central	Yukon River	3	3	100%	3	144	0	0	0	2	0	0	0	1	0
Circle	Yukon River	26	19	73%	12	895	85	499	0	188	0	0	3	10	0
Eagle	Yukon River	51	48	94%	37	2,081	104	2,871	0	384	29	2	6	93	1,197
FNSB ^b	Yukon River	79	76	96%	56	1,932	89	105	120	66	62	32	21	4	0
	Tolovana River	94	85	90%	49	0	0	0	0	0	0	15	394	0	0
	Kantishna River	1	1	100%	1	0	0	0	0	0	0	0	20	0	0
	Tanana River	17	17	100%	10	380	30	1,949	1,016	60	3	4	4	18	0
	FNSB Subtotal	191	179	94%	116	2,312	119	2054	1136	126	65	51	439	22	0
Healy	Tanana River	4	4	100%	2	0	0	512	1,634	246	0	25	12	0	0
	Kantishna River	1	1	100%	1	0	0	741	940	1	0	0	0	0	0
	Healy Subtotal	5	5	100%	3	0	0	1,253	2,574	247	0	25	12	0	0
Manley	Yukon River	2	2	100%	2	225	0	0	0	0	0	0	0	0	0
	Tanana River	14	13	93%	6	213	65	1,303	886	1	1	0	32	3	0
	Manley Subtotal	16	15	94%	8	438	65	1,303	886	1	1	0	32	3	0
Minto	Yukon River	1	1	100%	1	40	0	0	0	0	0	0	0	0	0
	Tolovana River	25	20	80%	8	0	0	0	0	334	63	9	572	88	0
	Tanana River	27	22	81%	9	317	625	675	423	125	36	0	144	6	3
	Minto Subtotal	53	43	81%	18	357	625	675	423	459	99	9	716	94	3
Nenana	Yukon River	1	1	100%	1	80	0	0	25	1	0	0	0	0	0
	Tanana River	31	30	97%	19	1,130	2,193	7,494	4,863	446	7	8	5	20	2
	Kantishna River	2	2	100%	1	63	0	308	568	33	1	7	2	49	6
	Nenana Subtotal	34	33	97%	21	1,273	2,193	7,802	5,456	480	8	15	7	69	8
Stevens Village	Yukon River	5	4	80%	4	493	0	3	0	0	0	0	0	0	0
Upper Tanana Villages (UTV) ^c	Yukon River	7	6	86%	2	40	0	0	0	0	0	0	0	0	0
	Tanana River	36	30	83%	17	30	0	4	0	1,482	0	14	10	33	5
	UTV Subtotal	43	36	84%	19	70	0	4	0	1,482	0	14	10	33	5
Other ^d	Yukon River	6	5	83%	2	146	0	0	0	500	0	0	30	6	0
	Kantishna River	1	1	100%	1	0	0	0	0	3	0	1	1	0	0
	Tanana River	6	6	100%	5	12	1	0	33	506	0	0	0	490	3
	Other Subtotal	13	12	92%	8	158	1	0	33	1,009	0	1	31	496	3
Subsistence Use Permit Subtotals		440	397	90%	249	8,221	3,192	16,464	10,508	4,378	202	117	1,256	821	1,216
Personal Use Permit															
Nenana	Tanana River	2	2	100%	2	22	53	38	0	0	0	0	0	0	0
Upper Tanana Villages (UTV) ^c	Tanana River	2	2	100%	2	0	0	0	0	10	0	5	0	135	7
FNSB	Tanana River	70	68	97%	31	182	95	356	549	12	1	0	0	0	0
Personal Use Permit Subtotals		74	72	97%	35	204	148	394	549	22	1	5	0	135	7
Permit Totals		514	469	91%	284	8,425	3,340	16,858	11,057	4,400	203	122	1,256	956	1,223

^a As of June 26, 2004.^b Fairbanks North Star Borough (FNSB) includes residents from the communities of Ester, Fairbanks, North Pole, Salcha, and Two Rivers.^c Upper Tanana Villages include residents from the communities of Delta Junction, Northway, Tanacross, and Tok.^d The category "other" represents residents from any other Alaskan community who were issued a subsistence fishing permit.

Figure 2. Yukon Area postseason subsistence salmon harvest survey form, 2003

Community _____ HHID# _____
 Date of Survey _____ Person Interviewed _____
 Interviewer _____ Relation to HH _____

**2003 Yukon Area Postseason Subsistence Salmon Harvest Survey
 CONFIDENTIAL INFORMATION**

1. We would like to make sure we have the correct name and address for your household.

Head of Household _____
 Mailing Address _____ Telephone: _____
 Permanent Note _____
 Significant Other _____
 Permanent Note _____

Adult household member was contacted and declined to be interviewed. [] Reason given: _____

2. How many people live in your household? _____
 3. Did anyone in your household catch salmon for subsistence use this year? Yes _____ No _____ (If "No", go to area II)
 Fish use includes salmon eaten fresh, frozen, dried, smoked, and those used for dog food.

I. HOUSEHOLDS THAT FISHED

4. May I have your salmon catch calendar?

Picked up by interviewer _____ Didn't get one _____ Didn't Use _____ Not available _____ Already sent in _____
 If you used a calendar are all the fish harvested on it? Yes _____ No _____ (if no, estimate remainder on calendar)

5. How many total salmon did you or your fishing group catch this year? (group may include other households)

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

6. How many households help catch these fish? _____ (Names) _____

- *7. How many total salmon did your household catch for subsistence purposes this year?

(Include only fish caught by this household, not the group, includes fish taken home from commercial periods.)

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

8. Did you or anyone in this household commercial fish this year? Yes _____ No _____

9. If Yes. How much of your household's salmon catch was taken commercially? (i.e. retained by a commercial fisherman during a commercial fishing period for subsistence use).

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

10. How much of your household's salmon catch was "lost" to animals (bears, birds), spoilage, sick fish (Ichthyophonus h.), and/or other?

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

- **11. How many salmon did you keep for your household's use? (do not include fish given away or 'lost')

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

12. Did your household share the salmon catch with any other households? (names, species and numbers)

13. Where do you catch your subsistence salmon? (Circle all that apply and show harvest by area if more than one)

Ocean 1 2 3 4A 4B 4C 5A 5B 5C 5D (Ft Yukon ↑ or ↓) Innoko Koyukuk Chandalar Porcupine Black
 Area _____ CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____
 Area _____ CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

14. What is your households' primary type of salmon fishing gear? (In order of importance 1= primary)

SET NET _____ DRIFT NET _____ FISH WHEEL _____ HOOK & LINE _____ DIPNET _____ OTHER _____

Figure 2. (page 2 of 2).

II. ALL HOUSEHOLDS

15. Did your household catch any other fish besides salmon? Yes _____ No _____

(Harvest numbers should include from September/October of last year to now) (Large Whitefish are 4 pounds or greater)

LG WHITEFISH _____ SM WHITEFISH _____ SHEEFISH _____ BURBOT _____ PIKE _____ BLACKFISH _____
GRAYLING _____ SUCKERS _____ TROUT (Arctic Char) _____ EELS (Lamprey) _____ TOMCOD (Saffron) _____

**16. Was your household given any salmon? Yes _____ No _____ Code: S=Subsistence, C=Commercial, T=Test Fish

Code: _____ Fishermen/Project (Name) _____

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

Code: _____ Fishermen/Project (Name) _____

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

17. How many dogs (including puppies) does your household have? _____ (if "No" on questions 3 and 16 go to question 22)

18. Do you feed whole salmon to your dogs? Yes _____ No _____ Only Feed Scraps _____ (if "No" go to question 21)

19. Were any of the salmon put up for the dogs from the commercial fishery? Yes _____ No _____

20. Estimate harvest of salmon put up for dogs this year by fishery (numbers should represent whole fish, not scraps):

(subsistence) CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____

(commercial) CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____

21. How successful was your household in meeting its subsistence salmon needs? (indicate percent success with "x")

Chinook: _____ (100%) _____ (75%) _____ (50%) _____ (25%) If poor, why? _____

Summer Chum: _____ (100%) _____ (75%) _____ (50%) _____ (25%) If poor, why? _____

Fall Chum: _____ (100%) _____ (75%) _____ (50%) _____ (25%) If poor, why? _____

Coho: _____ (100%) _____ (75%) _____ (50%) _____ (25%) If poor, why? _____

22. Additional Comments: _____

THANK YOU FOR YOUR HELP. THIS INFORMATION IS USED TO DOCUMENT THE SUBSISTENCE SALMON HARVEST WITHIN THE YUKON RIVER DRAINAGE AND TO TRY TO ENSURE THERE WILL BE ENOUGH SALMON FOR THE FUTURE.

Interviewer, please note any comments about this interview or anything of value for assisting data analysis (attach extra page if necessary).

THIS HOUSEHOLD'S TOTAL SUBSISTENCE SALMON CATCH (This area is to be filled in by the surveyor after the interview.)
(Totals from question *7)

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

THIS HOUSEHOLD'S TOTAL SUBSISTENCE SALMON USE (This area is to be filled in by the surveyor after the interview.)
(Add totals numbers obtained from question **11 to numbers obtained from question **16)

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

Complete Survey _____ Partial Survey _____ No Survey _____

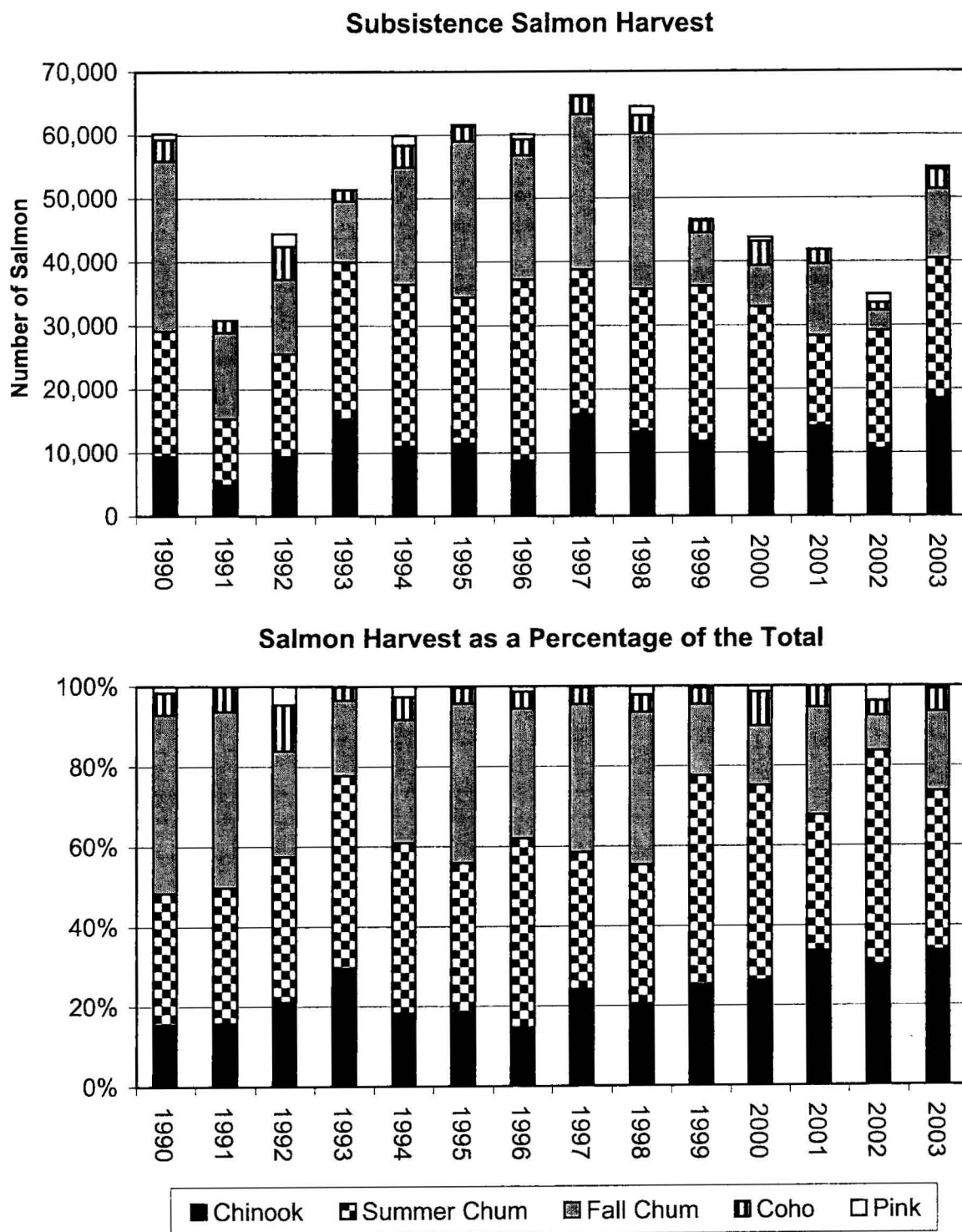


Figure 3. Yukon Area subsistence salmon harvest reported on catch calendars from 1990 to 2003.

5 AAC 99.015 JOINT BOARD NONSUBSISTENCE AREAS. (4) The Fairbanks Nonsubsistence Area is comprised of the following: within Unit 20(A) as defined by 5 AAC 92.450(20)(A) east of the Wood River drainage and south of the Rex Trail but including the upper Wood River drainage south of its confluence with Chicken Creek, within Unit 20(B) as defined by 5AAC 92.450(20)(B) the North Star Borough and that portion of the Washington Creek drainage east of the Elliot Highway, within 20(D) as defined by 5 AAC 92.450(20)(D) west of the Tanana River between its confluence's with the Johnson and Delta Rivers, west of the west bank of the Johnson River, and north and west of the Volkmar drainage, including the Goodpaster River drainage, and within Unit 25(C) as defined by 5 AAC 92.450(25)(C) the Preacher and Beaver Creek drainages.

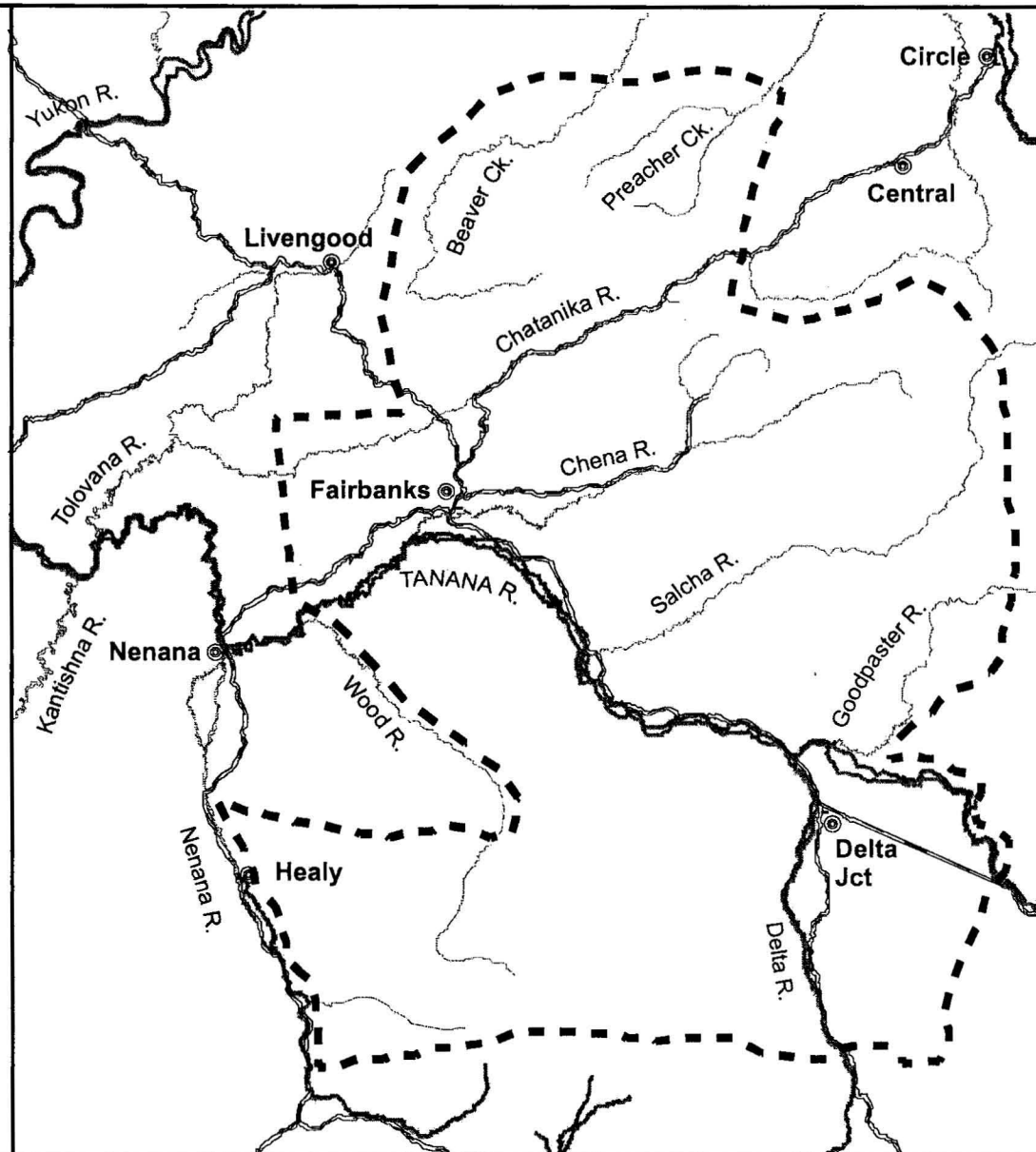
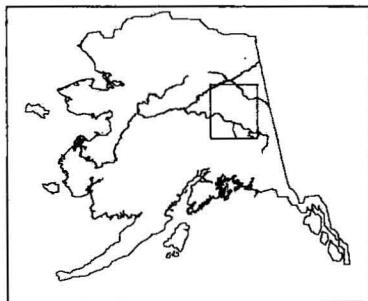


Figure 4. The Fairbanks Nonsubsistence Area, 2003.

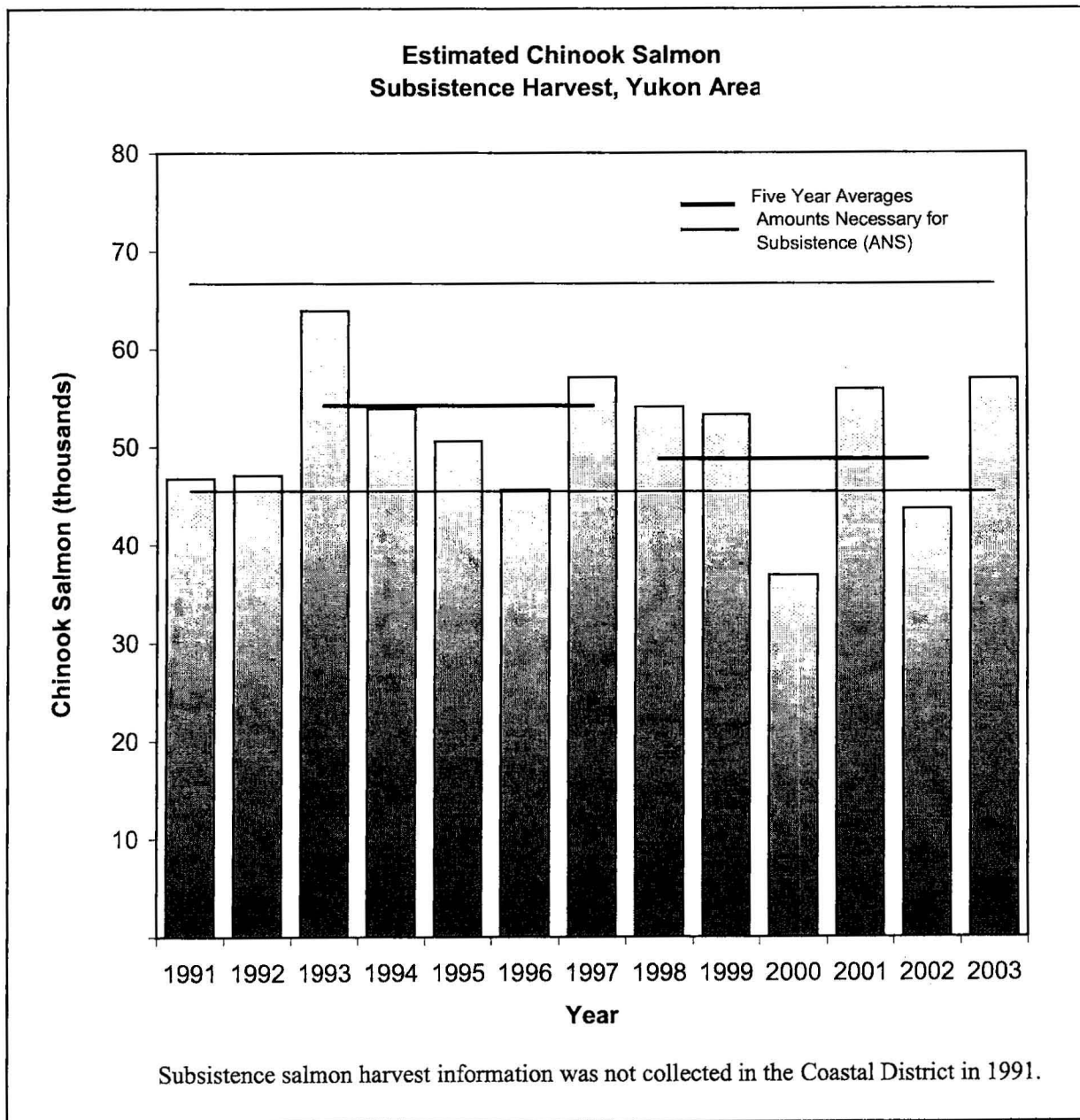


Figure 5. Estimated Chinook salmon subsistence harvest, Yukon Area, 1991 to 2003.

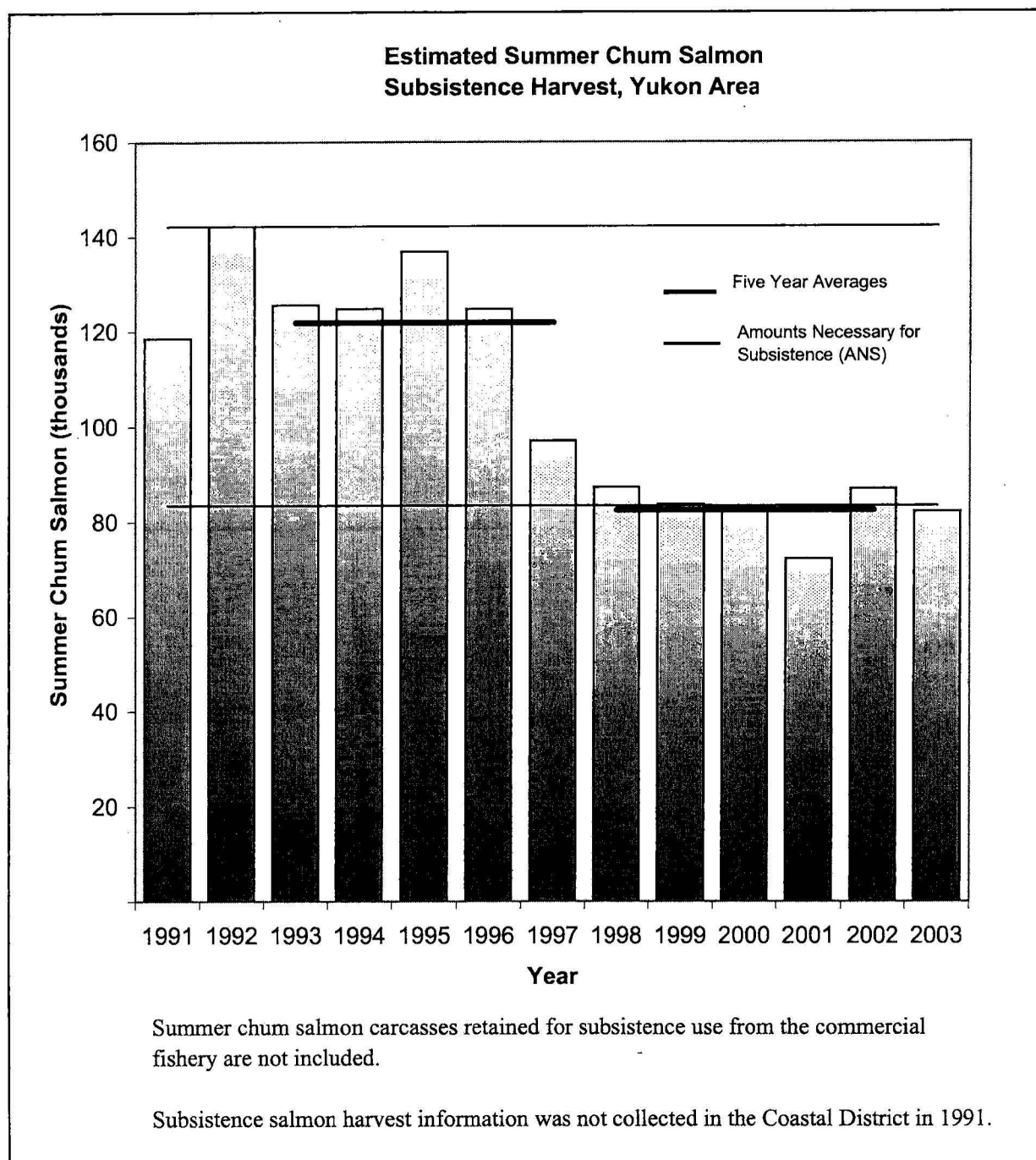
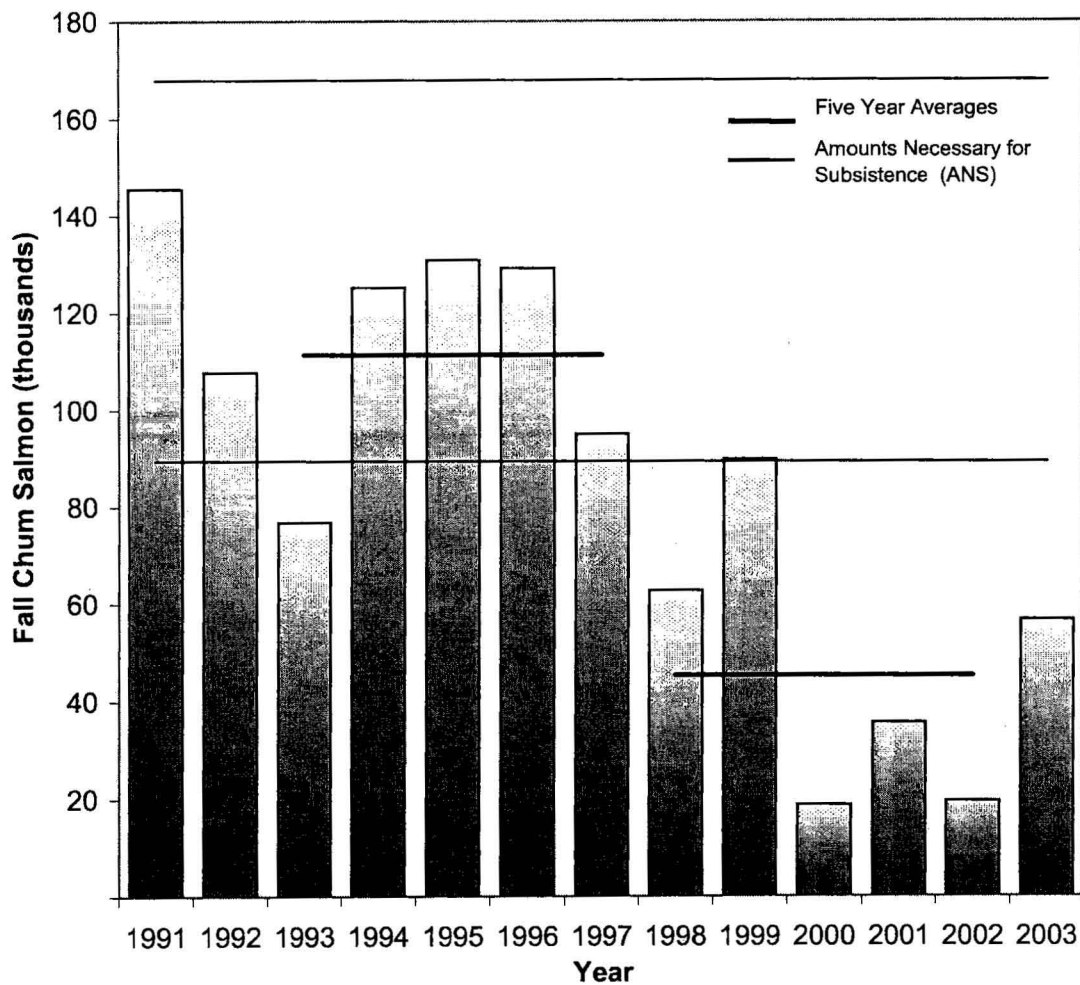


Figure 6. Estimated summer chum salmon subsistence harvest, Yukon Area, 1991 to 2003.

Estimated Fall Chum Salmon Subsistence Harvest, Yukon Area



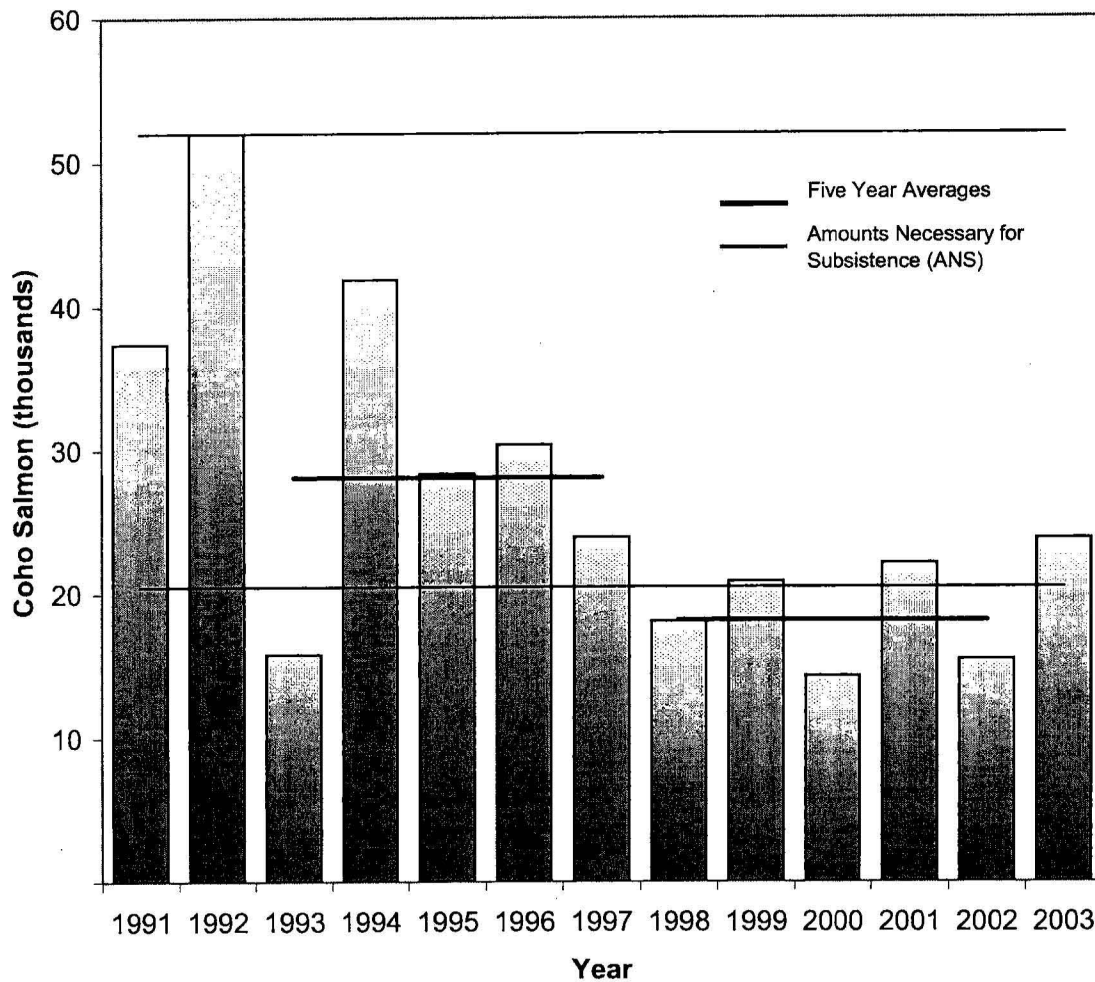
Fall chum salmon carcasses retained for subsistence use from the commercial fishery are not included (most significant in 1995 and 1996).

Does not include 14,500 to 15,000 coho salmon from Valdez Fisheries Development Association for Eagle's replacement subsistence salmon fishery in 2001 and 2003.

Subsistence salmon harvest information was not collected in the Coastal District in 1991.

Figure 7. Estimated fall chum salmon subsistence harvest, Yukon Area, 1991 to 2003.

Estimated Coho Salmon Subsistence Harvest, Yukon Area



Subsistence salmon harvest information was not collected in the Coastal District in 1991.

Coho salmon carcasses retained for subsistence use from the commercial fishery are not included (most significant in 2003).

Figure 8. Estimated coho salmon subsistence harvest, Yukon Area, 1991 to 2003.

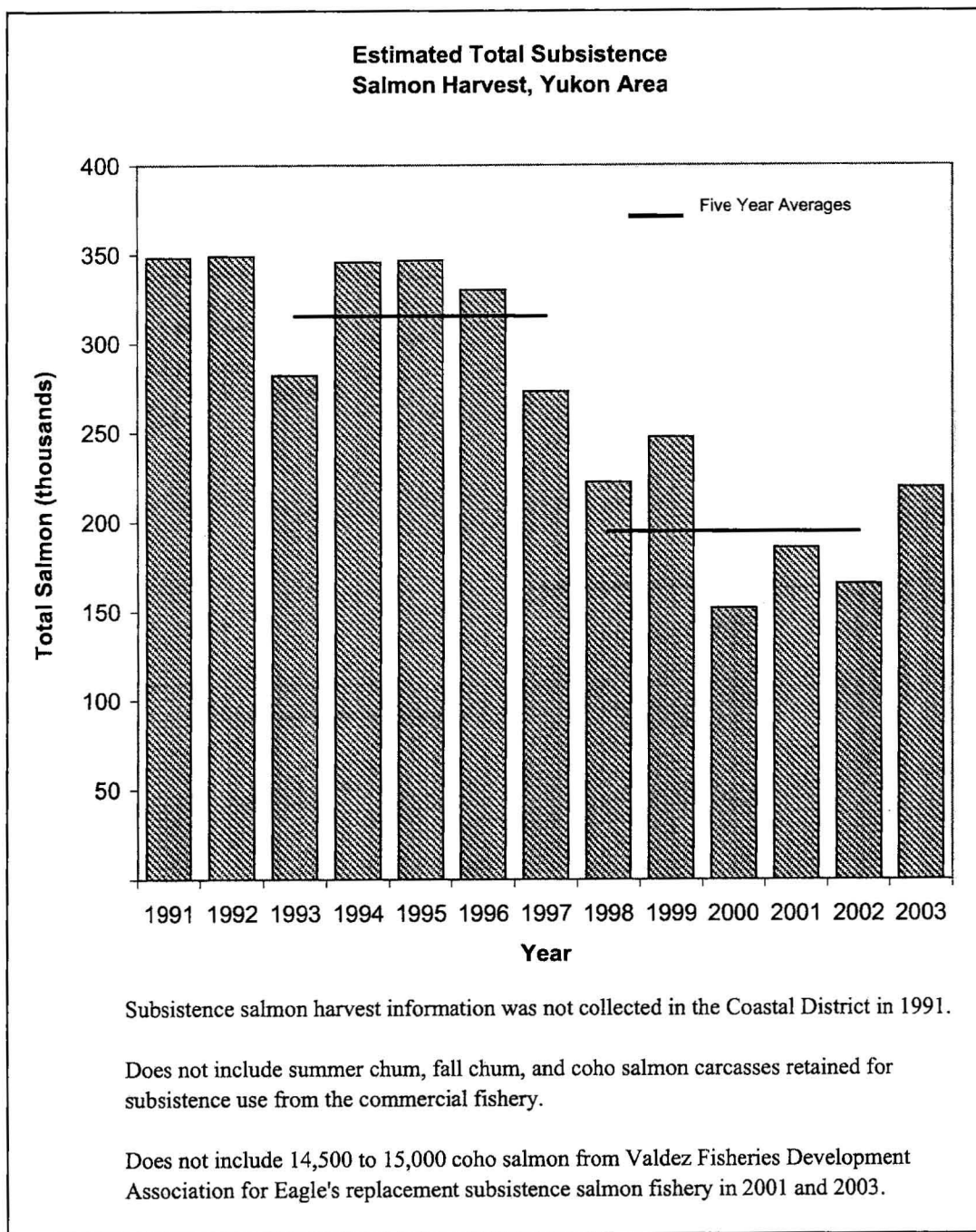


Figure 9. Estimated total subsistence salmon harvest, Yukon Area, 1991 to 2003.

APPENDIX A

**DETAILED YUKON RIVER SALMON HARVEST ESTIMATES AND RELATED
INFORMATION**

Appendix A.1. Estimated Chinook salmon subsistence harvest by residents of surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003. ^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total	Est	CI(95%)	
Hooper Bay	0	0	-	-	83	17	3.4	0.8	90	23	4.2	0.9	24	22	2.6	0.2	0	0	-	-	197	62	722	208
Scammon Bay	0	0	-	-	26	8	7.9	3.4	47	16	15.0	5.2	8	8	27.3	0.0	0	0	-	-	81	32	1,128	507
Coastal District	0	0	0.0	0.0	109	25	4.5	1.0	137	39	7.9	1.9	32	30	8.8	0.1	0	0	0.0	0.0	278	94	1,850	548
Nunam Iqua ^b	4	3	46.7	14.3	10	3	5.3	4.5	13	10	9.6	2.6	8	7	70.0	4.2	0	0	-	-	35	23	925	170
Alakanuk	0	0	-	-	45	9	10.3	5.0	70	14	14.2	4.4	11	7	21.9	4.4	0	0	-	-	126	30	1,700	750
Emmonak	0	0	-	-	78	18	9.7	4.4	59	25	18.4	5.8	22	18	26.6	3.6	0	0	-	-	159	61	2,426	962
Kotlik	0	0	-	-	26	7	1.3	1.1	48	10	12.0	5.8	14	13	15.6	1.1	1	1	79.0	-	89	31	907	546
District 1	4	3	46.7	14.3	159	37	8.2	2.6	190	59	14.7	2.8	55	45	29.2	1.8	1	1	79.0	0.0	409	145	5,958	1,348
Mountain Village	1	1	35.0	-	46	10	8.3	4.8	85	22	14.0	2.3	15	14	37.8	2.1	0	0	-	-	147	47	2,174	579
Pitkas Point	0	0	-	-	6	4	10.0	5.8	13	8	26.9	9.1	6	4	37.3	6.5	0	0	-	-	25	16	633	253
St. Mary's	1	1	7.0	-	35	7	7.4	3.5	52	16	14.1	3.1	24	23	38.1	1.1	0	0	-	-	112	47	1,916	402
Pilot Station	0	0	-	-	41	12	7.1	4.1	41	20	23.7	4.5	14	11	48.0	7.0	1	1	106.0	-	97	44	2,040	523
Marshall	0	0	-	-	18	3	11.7	10.7	45	11	27.6	7.5	12	11	50.5	2.5	0	0	-	-	75	25	2,059	762
District 2	2	2	21.0	0.0	146	36	8.2	2.5	236	77	19.0	2.0	71	63	42.0	1.7	1	1	106.0	0.0	456	179	8,822	1,190
Russian Mission	0	0	-	-	20	5	30.2	13.6	39	11	30.9	5.9	2	2	107.5	0.0	0	0	-	-	61	18	2,024	700
Holy Cross	0	0	-	-	17	2	5.0	4.7	32	13	59.5	13.1	6	6	67.5	0.0	0	0	-	-	55	21	2,395	835
Shageluk	1	0	-	-	14	11	16.7	4.3	12	9	10.4	2.3	4	4	40.0	0.0	1	1	30.0	-	32	25	550	129
District 3	1	0	0.0	0.0	51	18	18.1	5.7	83	33	39.0	5.8	12	12	65.0	0.0	1	1	30.0	0.0	148	64	4,969	1,097
Anvik	0	0	-	-	16	12	3.8	1.4	12	10	66.9	13.5	4	4	105.5	0.0	0	0	-	-	32	26	1,286	321
Grayling	0	0	-	-	11	5	20.0	9.3	30	7	44.3	10.3	3	2	21.5	10.7	0	0	-	-	44	14	1,613	642
Kaitag	0	0	-	-	15	4	23.8	13.2	41	12	31.4	5.0	2	1	97.0	-	0	0	-	-	58	17	1,838	557
Nulato	1	0	-	-	42	7	6.6	3.9	46	10	46.7	25.9	2	2	53.5	0.0	0	0	-	-	91	19	2,531	2,355
Koyukuk	0	0	-	-	12	8	4.8	2.7	11	9	58.1	9.8	2	2	41.5	0.0	1	1	39.0	-	26	20	818	220
Galena	2	0	-	-	105	26	5.5	2.2	53	13	40.0	10.5	5	4	82.0	9.6	1	0	-	-	166	43	3,112	1,183
Ruby	0	0	-	-	43	11	0.0	0.0	15	5	30.0	8.6	2	1	52.0	-	2	2	38.5	0.0	62	19	631	253
Huslia	0	0	-	-	49	8	1.3	1.1	25	7	5.7	2.5	3	2	21.5	3.8	1	1	200.0	-	78	18	469	167
Hughes	0	0	-	-	9	8	0.0	0.0	7	6	3.7	1.4	4	4	21.8	0.0	0	0	-	-	20	18	113	19
Allakaket	0	0	-	-	29	6	1.2	0.7	15	4	12.5	10.7	2	2	11.5	0.0	2	2	31.0	0.0	48	14	306	318
Alatna	0	0	-	-	4	3	1.0	0.5	1	1	8.0	-	0	0	-	-	0	0	-	-	5	4	12	4
Bettles	0	0	-	-	19	13	0.0	0.0	0	0	-	-	0	0	-	-	0	0	-	-	19	13	0	0
District 4	3	0	0.0	0.0	354	111	4.7	1.0	256	84	35.7	5.5	29	24	53.8	2.0	7	6	54.0	0.0	649	225	12,729	2,830
Tanana	0	0	-	-	85	16	4.9	3.0	21	8	119.1	41.3	4	3	101.0	28.4	7	7	301.3	0.0	97	34	5,332	1,757
Rampart	1	1	0.0	-	5	4	0.0	0.0	7	6	23.3	8.4	3	3	416.0	0.0	1	0	-	-	17	14	1,411	116
Stevens Village	2	2	22.0	0.0	12	7	14.3	9.2	10	8	22.1	5.8	4	3	171.0	48.2	0	0	-	-	28	20	1,121	450
Birch Creek	1	0	-	-	6	6	0.0	0.0	2	2	39.0	0.0	0	0	-	-	0	0	-	-	9	8	78	0
Beaver	2	2	0.0	0.0	11	6	0.0	0.0	12	10	81.3	9.7	2	1	90.0	-	0	0	-	-	27	19	1,156	227
Fort Yukon	4	3	33.3	16.7	105	29	8.5	3.5	43	12	31.6	14.9	10	10	73.6	0.0	2	2	440.0	0.0	164	56	4,002	1,458
Venetie	3	3	0.0	0.0	21	20	1.0	0.2	10	9	4.4	1.4	1	1	0.0	-	1	1	60.0	-	36	34	125	29
Chalkyitsik	2	0	-	-	26	20	0.0	0.0	5	5	10.0	0.0	0	0	-	-	0	0	-	-	33	25	50	0
District 5	15	11	11.8	4.4	251	108	5.6	1.7	110	60	49.0	9.9	24	21	135.5	9.3	11	10	277.2	0.0	411	210	13,275	2,341
Survey Totals	25	16	16.2	3.5	1,070	335	6.5	0.8	1,012	352	25.8	2.0	223	195	46.9	1.2	21	19	173.4	0.0	2,351	917	47,603	4,269

^a The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).^b Formerly known as Sheldon or Sheldon Point.

Appendix A.2. Estimated summer chum salmon subsistence harvest by residents of surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003. ^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
																					Total	Est	CI(95%)	
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Total	(+/-)
Hooper Bay	0	0	-	-	83	17	39.4	7.3	90	23	69.3	15.6	24	22	48.3	3.2	0	0	-	-	197	62	10,658	2,991
Scammon Bay	0	0	-	-	26	8	15.5	10.3	47	16	54.6	12.8	8	8	42.9	0.0	0	0	-	-	81	32	3,310	1,288
Coastal District	0	0	0.0	0.0	109	25	33.7	6.1	137	39	64.2	11.1	32	30	46.9	2.4	0	0	0.0	0.0	278	94	13,968	3,257
Nunam Iqua ^b	4	3	64.0	9.8	10	3	40.0	33.5	13	10	46.9	10.6	8	7	161.9	13.0	0	0	-	-	35	23	2,561	742
Alakanuk	0	0	-	-	45	9	41.0	17.5	70	14	41.1	12.9	11	7	42.0	9.7	0	0	-	-	126	30	5,187	2,353
Emmonak	0	0	-	-	78	18	19.8	6.4	59	25	35.7	9.9	22	18	110.1	11.4	0	0	-	-	159	61	6,070	1,585
Kotlik	0	0	-	-	26	7	34.1	19.6	48	10	45.7	16.2	14	13	64.7	5.2	1	1	95.0	-	89	31	4,082	1,829
District 1	4	3	64.0	9.8	159	37	29.4	7.0	190	59	41.0	7.0	55	45	92.5	5.5	1	1	95.0	0.0	409	145	17,900	3,456
Mountain Village	1	1	16.0	-	46	10	33.0	14.3	85	22	42.5	10.2	15	14	90.0	6.0	0	0	-	-	147	47	6,497	2,142
Pitkas Point	0	0	-	-	6	4	20.3	11.7	13	8	27.6	9.7	6	4	53.3	8.8	0	0	-	-	25	16	800	300
St. Mary's	1	1	25.0	-	35	7	11.4	8.4	52	16	31.9	8.6	24	23	101.5	3.9	0	0	-	-	112	47	4,521	1,066
Pilot Station	0	0	-	-	41	12	6.7	5.6	41	20	26.4	8.1	14	11	48.9	6.1	1	1	65.0	-	97	44	2,103	810
Marshall	0	0	-	-	18	3	8.0	7.3	45	11	5.8	4.0	12	11	32.2	3.5	0	0	-	-	75	25	792	447
District 2	2	2	20.5	0.0	146	36	16.8	5.3	236	77	29.6	4.5	71	63	72.9	2.4	1	1	65.0	0.0	456	179	14,713	2,582
Russian Mission	0	0	-	-	20	5	4.6	3.4	39	11	1.5	0.8	2	2	7.0	0.0	0	0	-	-	61	18	166	145
Holy Cross	0	0	-	-	17	2	0.0	0.0	32	13	5.7	2.9	6	6	5.3	0.0	0	0	-	-	55	21	214	184
Shageluk	1	0	-	-	14	11	72.7	25.2	12	9	55.6	27.8	4	4	399.8	0.0	1	1	2189.0	-	32	25	5,473	952
District 3	1	0	0.0	0.0	51	18	21.8	7.1	83	33	11.0	4.2	12	12	137.1	0.0	1	1	2189.0	0.0	148	64	5,853	980
Anvik	0	0	-	-	16	12	0.9	0.4	12	10	16.2	6.1	4	4	158.8	0.0	0	0	-	-	32	26	844	143
Grayling	0	0	-	-	11	5	2.0	1.5	30	7	19.3	12.0	3	2	157.0	76.2	0	0	-	-	44	14	1,072	838
Kaltag	0	0	-	-	15	4	0.0	0.0	41	12	8.0	5.3	2	1	350.0	-	0	0	-	-	58	17	1,028	427
Nulato	1	0	-	-	42	7	0.0	0.0	46	10	3.7	2.1	2	2	5.0	0.0	0	0	-	-	91	19	180	194
Koyukuk	0	0	-	-	12	8	0.0	0.0	11	9	11.6	4.7	2	2	4.5	0.0	1	1	1203.0	-	26	20	1,339	102
Galena	2	0	-	-	105	26	0.3	0.2	53	13	1.1	0.7	5	4	40.8	17.6	1	0	-	-	166	43	289	192
Ruby	0	0	-	-	43	11	0.0	0.0	15	5	19.2	15.7	2	1	96.0	-	2	2	198.0	0.0	62	19	876	461
Huslia	0	0	-	-	49	8	12.5	11.4	25	7	165.6	84.8	3	2	145.0	60.6	1	1	1000.0	-	78	18	6,187	4,315
Hughes	0	0	-	-	9	8	0.0	0.0	7	6	0.7	0.3	4	4	315.0	0.0	0	0	-	-	20	18	1,265	3
Allakaket	0	0	-	-	29	6	2.3	1.5	15	4	155.0	127.1	2	2	211.0	0.0	2	2	784.0	0.0	48	14	4,383	3,737
Alatna	0	0	-	-	4	3	5.0	2.5	1	1	30.0	-	0	0	-	-	0	0	-	-	5	4	50	20
Bettles	0	0	-	-	19	13	0.0	0.0	0	0	-	-	0	0	-	-	0	0	-	-	19	13	0	0
District 4	3	0	0.0	0.0	354	111	2.2	1.6	256	84	32.2	11.3	29	24	149.6	10.5	7	6	595.3	0.0	649	225	17,513	5,813
Tanana	0	0	-	-	65	16	5.0	3.1	21	8	51.9	39.2	4	3	3.3	1.7	7	7	235.3	0.0	97	34	3,075	1,658
Rampart	1	1	0.0	-	5	4	0.0	0.0	7	6	0.3	0.1	3	3	1.0	0.0	1	0	-	-	17	14	5	2
Stevens Village	2	2	0.0	0.0	12	7	0.0	0.0	10	9	0.0	0.0	4	3	0.0	0.0	0	0	-	-	28	21	0	0
Birch Creek	1	0	-	-	6	6	0.0	0.0	2	2	0.0	0.0	0	0	-	-	0	0	-	-	9	8	0	0
Beaver	2	2	0.0	0.0	11	6	0.0	0.0	12	10	0.6	0.2	2	1	0.0	-	0	0	-	-	27	19	7	6
Fort Yukon	4	3	0.0	0.0	105	29	20.7	17.6	43	12	0.0	0.0	10	10	0.0	0.0	2	2	0.0	0.0	164	56	2,176	3,622
Venetie	3	3	0.0	0.0	21	20	0.0	0.0	10	9	0.0	0.0	1	1	0.0	-	1	1	0.0	-	36	34	0	0
Chalkyitsik	2	0	-	-	26	20	0.0	0.0	5	5	0.0	0.0	0	0	-	-	0	0	-	-	33	25	0	0
District 5	15	11	0.0	0.0	251	108	10.0	7.4	110	61	10.0	7.5	24	21	0.7	0.3	11	10	149.7	0.0	411	211	5,263	3,984
Survey Totals	25	16	11.9	1.6	1,070	335	14.2	2.3	1,012	353	33.4	3.7	223	195	79.6	2.1	21	19	388.7	0.0	2,351	918	75,210	8,935

^a The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).^b Formerly known as Sheldon or Sheldon Point.

Appendix A.3. Estimated fall chum salmon subsistence harvest by residents of surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003. ^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
																					Total		Est CI(95%)	
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Total	(+/-)
Hooper Bay	0	0	-	-	83	17	0.3	0.3	90	23	0.2	0.2	24	22	0.0	0.0	0	0	-	-	197	62	40	50
Scammon Bay	0	0	-	-	26	8	0.5	0.4	47	16	1.3	1.0	8	8	4.3	0.0	0	0	-	-	81	32	106	96
Coastal District	0	0	0.0	0.0	109	25	0.3	0.2	137	39	0.5	0.4	32	30	1.1	0.0	0	0	0.0	0.0	278	94	146	108
Nunam Iqua ^b	4	3	1.0	0.5	10	3	0.0	0.0	13	10	1.6	0.7	8	7	12.7	2.6	0	0	-	-	35	23	127	45
Alakanuk	0	0	-	-	45	9	3.1	2.7	70	14	2.9	1.6	11	7	0.3	0.2	0	0	-	-	126	30	348	321
Emmonak	0	0	-	-	78	18	0.6	0.5	59	25	1.4	0.6	22	18	0.0	0.0	0	0	-	-	159	61	128	104
Kotlik	0	0	-	-	26	7	3.0	2.6	48	10	0.7	0.5	14	13	12.7	2.3	1	1	0.0	-	89	31	289	151
District 1	4	3	1.0	0.5	159	37	1.6	0.9	190	59	1.8	0.6	55	45	5.1	0.7	1	1	0.0	0.0	409	145	892	372
Mountain Village	1	1	0.0	-	46	10	0.0	0.0	85	22	6.1	3.9	15	14	1.8	0.2	0	0	-	-	147	47	545	651
Pitkas Point	0	0	-	-	6	4	0.0	0.0	13	8	3.8	2.3	6	5	0.0	0.0	0	0	-	-	25	17	49	59
St. Mary's	1	1	0.0	-	35	7	3.6	3.2	52	16	7.4	3.8	24	23	10.6	1.3	0	0	-	-	112	47	762	452
Pilot Station	0	0	-	-	41	12	0.0	0.0	41	20	0.0	0.0	14	11	0.0	0.0	1	1	0.0	-	97	44	0	0
Marshall	0	0	-	-	18	3	0.0	0.0	45	11	4.0	2.3	12	11	17.8	2.8	0	0	-	-	75	25	394	217
District 2	2	2	0.0	0.0	146	36	0.9	0.8	236	77	4.8	1.7	71	64	7.0	0.6	1	1	0.0	0.0	456	180	1,750	824
Russian Mission	0	0	-	-	20	5	5.0	4.3	39	11	13.2	8.1	2	2	0.5	0.0	0	0	-	-	61	18	615	644
Holy Cross	0	0	-	-	17	2	0.0	0.0	32	13	0.0	0.0	6	6	1.5	0.0	0	0	-	-	55	21	9	0
Shageluk	1	0	-	-	14	11	3.1	0.9	12	10	5.9	2.4	4	4	0.0	0.0	1	1	0.0	-	32	26	114	60
District 3	1	0	0.0	0.0	51	18	2.8	1.7	83	34	7.0	3.8	12	12	0.8	0.0	1	1	0.0	0.0	148	65	738	647
Anvik	0	0	-	-	16	12	0.9	0.3	12	10	13.0	4.1	4	4	2.0	0.0	0	0	-	-	32	26	179	98
Grayling	0	0	-	-	11	5	0.0	0.0	30	7	13.7	5.7	3	2	10.0	5.8	0	0	-	-	44	14	441	337
Kaitag	0	0	-	-	15	4	0.0	0.0	41	12	4.6	2.6	2	1	40.0	-	0	0	-	-	58	17	268	210
Nulato	1	0	-	-	42	7	14.3	13.0	46	10	16.1	13.2	2	2	0.0	0.0	0	0	-	-	91	19	1,341	1,602
Koyukuk	0	0	-	-	12	8	8.5	3.3	11	9	3.4	1.4	2	2	27.0	0.0	1	1	641.0	-	26	20	835	83
Galena	2	0	-	-	105	26	1.1	0.6	53	13	20.0	11.2	5	4	66.5	17.5	1	0	-	-	166	43	1,510	1,180
Ruby	0	0	-	-	43	11	0.0	0.0	15	5	32.0	17.8	2	1	710.0	-	2	2	215.5	0.0	62	19	2,331	523
Huslia	0	0	-	-	49	8	0.0	0.0	25	7	51.4	42.2	3	2	0.0	0.0	1	1	500.0	-	78	18	1,786	2,070
Hughes	0	0	-	-	9	8	0.0	0.0	7	6	6.7	2.5	4	4	112.5	0.0	0	0	-	-	20	18	497	35
Allakaket	0	0	-	-	29	6	0.3	0.3	15	4	0.0	0.0	2	2	0.0	0.0	2	2	47.5	0.0	48	14	105	17
Alatna	0	0	-	-	4	3	0.0	0.0	1	1	0.0	-	0	0	-	-	0	0	-	-	5	4	0	0
Bettles	0	0	-	-	19	13	0.0	0.0	0	0	-	-	0	0	-	-	0	0	-	-	19	13	0	0
District 4	3	0	0.0	0.0	354	111	2.4	1.6	256	84	17.2	5.5	29	24	81.9	3.1	7	6	238.1	0.0	649	225	9,293	2,948
Tanana	0	0	-	-	65	16	0.0	0.0	21	8	0.0	0.0	4	3	566.7	212.8	7	7	1720.1	0.0	97	34	14,308	1,668
Rampart	1	1	0.0	-	5	4	0.0	0.0	7	6	0.0	0.0	3	3	5.0	0.0	1	0	-	-	17	14	15	0
Stevens Village	2	2	0.0	0.0	12	7	71.4	46.1	10	9	0.0	0.0	4	3	0.0	0.0	0	0	-	-	28	21	857	1,084
Birch Creek	1	0	-	-	6	6	0.3	0.0	2	2	0.0	0.0	0	0	-	-	0	0	-	-	9	8	2	0
Beaver	2	2	0.0	0.0	11	6	0.0	0.0	12	10	16.0	4.7	2	1	0.0	-	0	0	-	-	27	19	192	111
Fort Yukon	4	3	33.3	16.7	105	29	20.0	11.1	43	12	12.3	8.6	10	10	143.0	0.0	2	2	1500.0	0.0	164	56	7,190	2,395
Venetie	3	3	1.7	0.0	21	20	3.8	0.6	10	9	18.7	3.8	1	1	0.0	-	1	1	500.0	-	36	34	770	79
Chalkyitsik	2	0	-	-	26	20	10.0	4.8	5	5	16.0	0.0	0	0	-	-	0	0	-	-	33	25	340	245
District 5	15	11	9.2	4.4	251	108	13.1	5.2	110	61	9.0	3.4	24	21	154.7	35.5	11	10	1412.8	0.0	411	211	23,674	3,126
Survey Totals	25	16	5.7	2.7	1,070	335	4.4	1.3	1,012	354	7.4	1.5	223	196	31.0	3.8	21	19	819.4	0.0	2,351	920	36,493	4,440

^a The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).^b Formerly known as Sheldon or Sheldon Point.

Appendix A.4. Estimated coho salmon subsistence harvest by residents of surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003. ^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total		Est	CI(95%)
																					N	n	Total	(+/-)
Hooper Bay	0	0	-	-	83	17	0.4	0.3	90	23	1.8	1.5	24	22	2.3	0.5	0	0	-	-	197	62	244	270
Scammon Bay	0	0	-	-	26	8	0.3	0.2	47	16	0.6	0.5	8	8	1.5	0.0	0	0	-	-	81	32	48	48
Coastal District	0	0	0.0	0.0	109	25	0.3	0.2	137	39	1.4	1.0	32	30	2.1	0.4	0	0	0.0	0.0	278	94	292	275
Nunam Iqua ^b	4	3	12.0	3.8	10	3	0.0	0.0	13	10	3.2	0.7	8	7	3.4	0.7	0	0	-	-	35	23	117	36
Alakanuk	0	0	-	-	45	9	1.8	1.5	70	14	1.6	1.3	11	7	0.3	0.1	0	0	-	-	126	30	193	218
Emmonak	0	0	-	-	78	18	0.6	0.5	59	25	0.0	0.0	22	18	0.0	0.0	0	0	-	-	159	61	43	74
Kotlik	0	0	-	-	26	7	0.1	0.1	48	10	1.2	0.6	14	13	14.2	2.5	1	1	11.0	-	89	31	272	92
District 1	4	3	12.0	3.8	159	37	0.8	0.5	190	59	1.1	0.5	55	45	4.2	0.6	1	1	11.0	0.0	409	145	625	251
Mountain Village	1	1	0.0	-	46	10	0.0	0.0	85	22	2.5	1.2	15	14	11.0	2.4	0	0	-	-	147	47	374	218
Pitkas Point	0	0	-	-	6	4	0.0	0.0	13	8	10.0	6.2	6	5	0.0	0.0	0	0	-	-	25	17	130	158
St. Mary's	1	1	0.0	-	35	7	1.4	1.3	52	16	3.6	1.9	24	23	1.6	0.2	0	0	-	-	112	47	276	215
Pilot Station	0	0	-	-	41	12	0.0	0.0	41	20	0.0	0.0	14	11	0.0	0.0	1	1	0.0	-	97	44	0	0
Marshall	0	0	-	-	18	3	0.0	0.0	45	11	0.1	0.1	12	11	5.0	0.7	0	0	-	-	75	25	64	17
District 2	2	2	0.0	0.0	146	36	0.3	0.3	236	77	2.3	0.7	71	64	3.7	0.5	1	1	0.0	0.0	456	180	844	345
Russian Mission	0	0	-	-	20	5	3.0	2.6	39	11	2.7	1.6	2	2	6.0	0.0	0	0	-	-	61	18	178	156
Holy Cross	0	0	-	-	17	2	0.0	0.0	32	13	15.4	11.9	6	6	1.0	0.0	0	0	-	-	55	21	498	744
Shageluk	1	0	-	-	14	11	0.5	0.3	12	10	1.0	0.4	4	4	0.0	0.0	1	1	15.0	-	32	26	35	12
District 3	1	0	0.0	0.0	51	18	1.3	1.0	83	34	7.4	4.6	12	12	1.5	0.0	1	1	15.0	0.0	148	65	711	760
Anvik	0	0	-	-	16	12	0.8	0.4	12	10	0.0	0.0	4	4	0.0	0.0	0	0	-	-	32	26	12	12
Grayling	0	0	-	-	11	5	15.0	11.1	30	7	11.4	6.2	3	2	17.0	4.0	0	0	-	-	44	14	559	435
Kaltag	0	0	-	-	15	4	5.5	4.7	41	12	3.8	2.1	2	1	100.0	-	0	0	-	-	58	17	440	218
Nulato	1	0	-	-	42	7	2.9	2.6	46	10	16.1	8.7	2	2	33.5	0.0	0	0	-	-	91	19	928	812
Koyukuk	0	0	-	-	12	8	0.0	0.0	11	9	27.8	11.8	2	2	0.0	0.0	1	1	849.0	-	26	20	1,155	255
Galena	2	0	-	-	105	26	0.6	0.4	53	13	26.2	15.7	5	4	12.0	3.2	1	0	-	-	166	43	1,507	1,630
Ruby	0	0	-	-	43	11	0.0	0.0	15	5	0.0	0.0	2	1	0.0	-	2	2	324.0	0.0	62	19	648	0
Huslia	0	0	-	-	49	8	0.0	0.0	25	7	0.0	0.0	3	2	125.0	72.2	1	1	0.0	-	78	18	375	424
Hughes	0	0	-	-	9	8	0.0	0.0	7	6	0.0	0.0	4	4	5.0	0.0	0	0	-	-	20	18	20	0
Allakaket	0	0	-	-	29	6	0.3	0.3	15	4	5.0	4.3	2	2	0.0	0.0	2	2	7.0	0.0	48	14	99	127
Alatna	0	0	-	-	4	3	0.0	0.0	1	1	7.0	-	0	0	-	-	0	0	-	-	5	4	7	0
Bettles	0	0	-	-	19	13	0.0	0.0	0	0	-	-	0	0	-	-	0	0	-	-	19	13	0	0
District 4	3	0	0.0	0.0	354	111	1.3	0.5	256	84	11.8	3.7	29	24	26.7	7.5	7	6	215.9	0.0	649	225	5,750	1,953
Tanana	0	0	-	-	65	16	0.0	0.0	21	8	0.0	0.0	4	3	0.0	0.0	7	7	497.1	0.0	97	34	3,480	0
Rampart	1	1	0.0	-	5	4	0.0	0.0	7	6	0.0	0.0	3	3	0.0	0.0	1	0	-	-	17	14	0	0
Stevens Village	2	2	0.0	0.0	12	7	0.0	0.0	10	9	0.0	0.0	4	3	0.0	0.0	0	0	-	-	28	21	0	0
Birch Creek	1	0	-	-	6	6	0.0	0.0	2	2	0.0	0.0	0	0	-	-	0	0	-	-	9	8	0	0
Beaver	2	2	0.0	0.0	11	6	0.0	0.0	12	10	0.0	0.0	2	1	0.0	-	0	0	-	-	27	19	0	0
Fort Yukon	4	3	6.7	3.3	105	29	1.7	1.2	43	12	0.8	0.6	10	10	0.0	0.0	2	2	0.0	0.0	164	56	244	253
Venetie	3	3	0.0	0.0	21	20	0.0	0.0	10	9	1.1	0.4	1	1	0.0	-	1	1	0.0	-	36	34	11	7
Chalkyitsik	2	0	-	-	26	20	0.1	0.0	5	5	1.2	0.0	0	0	-	-	0	0	-	-	33	25	7	1
District 5	15	11	1.8	0.9	251	108	0.7	0.5	110	61	0.5	0.2	24	21	0.0	0.0	11	10	316.4	0.0	411	211	3,742	253
Survey Totals	25	16	3.0	0.8	1,070	335	0.9	0.2	1,012	354	4.6	1.0	223	196	6.1	1.0	21	19	238.9	0.0	2,351	920	11,964	2,171

^a The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).^b Formerly known as Sheldon or Sheldon Point.

Appendix A.5. Estimated Chinook salmon subsistence use by residents of surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003.^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total		Est	CI(95%)
																					N	n	Total	(+/-)
Hooper Bay	0	0	-	-	83	17	3.8	0.7	90	23	4.3	0.9	24	22	4.2	0.2	0	0	-	-	197	62	805	193
Scammon Bay	0	0	-	-	26	8	5.3	2.3	47	16	19.1	5.0	8	8	28.1	0.0	0	0	-	-	81	32	1,260	479
Coastal District	0	0	0.0	0.0	109	25	4.2	0.8	137	39	9.4	1.8	32	30	10.2	0.2	0	0	0.0	0.0	278	94	2,065	517
Nunam Iqua ^b	4	3	47.3	14.2	10	3	5.3	4.5	13	10	9.7	2.3	8	6	63.7	5.9	0	0	-	-	35	22	878	178
Alakanuk	0	0	-	-	45	9	7.3	3.1	70	14	14.2	4.0	11	7	24.7	3.6	0	0	-	-	126	30	1,597	621
Emmonak	0	0	-	-	78	18	14.1	4.1	59	25	16.6	2.2	22	18	26.0	2.7	0	0	-	-	159	61	2,650	681
Kotlik	0	0	-	-	26	7	7.1	3.4	48	10	11.3	4.9	14	13	23.1	1.6	1	1	84.0	-	89	31	1,135	494
District 1	4	3	47.3	14.2	159	37	10.5	2.3	190	59	13.9	2.1	55	44	30.5	1.6	1	1	84.0	0.0	409	144	6,260	1,061
Mountain Village	1	1	32.0	-	46	10	9.8	4.7	85	22	15.9	3.2	15	14	25.7	1.5	0	0	-	-	147	47	2,221	686
Pitkas Point	0	0	-	-	6	4	10.0	5.8	13	8	28.6	7.6	6	4	36.5	6.7	0	0	-	-	25	16	651	220
St. Mary's	1	1	7.0	-	35	7	8.1	3.4	52	16	12.4	2.3	24	23	36.6	1.1	0	0	-	-	112	47	1,816	337
Pilot Station	0	0	-	-	41	12	10.7	3.2	41	20	29.1	5.0	14	11	53.0	7.3	1	1	106.0	-	97	44	2,478	518
Marshall	0	0	-	-	18	3	18.3	9.3	45	11	28.7	5.9	12	11	42.7	2.6	0	0	-	-	75	25	2,135	614
District 2	2	2	19.5	0.0	146	36	10.7	2.2	236	77	20.6	2.0	71	63	38.5	1.7	1	1	106.0	0.0	466	179	9,301	1,131
Russian Mission	0	0	-	-	20	5	33.2	12.8	39	11	32.5	5.4	2	2	95.5	0.0	0	0	-	-	61	18	2,121	652
Holy Cross	0	0	-	-	17	2	8.0	1.9	32	13	57.4	11.2	6	6	51.8	0.0	0	0	-	-	55	21	2,283	704
Shageluk	1	0	-	-	14	11	16.9	3.9	12	9	15.4	2.0	4	4	36.0	0.0	1	1	30.0	-	32	25	596	116
District 3	1	0	0.0	0.0	51	18	20.3	5.2	83	33	39.6	5.0	12	12	53.8	0.0	1	1	30.0	0.0	148	64	5,000	967
Anvik	0	0	-	-	16	12	7.5	1.4	12	10	70.4	15.5	4	4	89.0	0.0	0	0	-	-	32	26	1,321	367
Grayling	0	0	-	-	11	5	22.8	4.1	30	7	32.9	10.4	3	2	21.5	10.7	0	0	-	-	44	14	1,301	621
Kaitag	0	0	-	-	15	4	30.8	18.6	41	12	31.3	4.9	2	1	95.0	-	0	0	-	-	58	17	1,933	674
Nulato	1	0	-	-	42	7	13.6	4.5	46	10	39.2	19.4	2	2	53.5	0.0	0	0	-	-	91	19	2,480	1,786
Koyukuk	0	0	-	-	12	8	4.9	1.1	11	9	41.3	5.7	2	2	41.5	0.0	1	1	32.0	-	26	20	628	126
Galena	2	0	-	-	105	26	5.8	1.2	53	13	27.5	2.5	5	4	66.5	11.2	1	0	-	-	166	43	2,394	378
Ruby	0	0	-	-	43	11	1.3	0.5	15	5	28.0	8.0	2	1	38.0	-	2	2	38.5	0.0	62	19	628	239
Huslia	0	0	-	-	49	8	12.9	6.0	25	7	6.7	2.6	3	2	19.5	2.6	1	1	100.0	-	78	18	957	591
Hughes	0	0	-	-	9	8	0.4	0.1	7	6	5.3	1.3	4	4	22.3	0.0	0	0	-	-	20	18	130	18
Allakaket	0	0	-	-	29	6	2.0	0.9	15	4	7.5	6.4	2	2	9.5	0.0	2	2	30.0	0.0	48	14	250	196
Alatna	0	0	-	-	4	3	3.7	0.3	1	1	5.0	-	0	0	-	-	0	0	-	-	5	4	20	3
Bettles	0	0	-	-	19	13	1.1	0.3	0	0	-	-	0	0	-	-	0	0	-	-	19	13	20	10
District 4	3	0	0.0	0.0	354	111	8.0	1.3	256	84	29.6	3.9	29	24	47.4	2.2	7	6	38.4	0.0	649	225	12,062	2,184
Tanana	0	0	-	-	65	16	4.6	1.3	21	8	83.8	35.4	4	3	92.7	24.9	7	7	290.6	0.0	97	34	4,464	1,480
Rampart	1	1	0.0	-	5	4	1.3	0.3	7	6	24.2	8.2	3	3	358.0	0.0	1	0	-	-	17	14	1,249	113
Stevens Village	2	2	27.0	0.0	12	7	17.9	8.9	10	8	23.6	5.6	4	3	160.7	50.2	0	0	-	-	28	20	1,147	459
Birch Creek	1	0	-	-	6	6	1.5	0.0	2	2	19.5	0.0	0	0	-	-	0	0	-	-	9	8	48	0
Beaver	2	2	2.5	0.0	11	6	15.3	9.0	12	10	41.8	5.1	2	1	84.0	-	0	0	-	-	27	19	843	228
Fort Yukon	4	3	36.3	15.9	105	29	10.2	1.9	43	12	32.9	12.6	10	10	46.5	0.0	2	2	337.5	0.0	164	56	3,772	1,142
Venetie	3	3	0.0	0.0	21	20	1.4	0.2	10	9	5.2	1.4	1	1	0.0	-	1	1	10.0	-	36	34	91	28
Chalkyitsik	2	0	-	-	26	20	2.3	0.3	5	5	10.6	0.0	0	0	-	-	0	0	-	-	33	25	113	14
District 5	15	11	13.6	4.2	251	108	7.4	1.1	110	60	38.4	8.4	24	21	113.3	9.3	11	10	247.2	0.0	411	210	11,727	1,942
Survey Totals	25	16	17.3	3.4	1,070	335	8.8	0.7	1,012	352	23.6	1.6	223	194	42.5	1.2	21	19	152.8	0.0	2,351	916	46,415	3,485

^a The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).^b Formerly known as Sheldon or Sheldon Point.

Appendix A.6. Estimated summer chum salmon subsistence use by residents of surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003.^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
																					Total	Est	CI(95%)	
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Total	(+/-)
Hooper Bay	0	0	-	-	83	17	37.9	6.8	90	23	61.3	11.2	24	21	73.3	4.8	0	0	-	-	197	61	10,423	2,273
Scammon Bay	0	0	-	-	26	8	20.5	10.1	47	16	59.1	12.6	8	8	49.9	0.0	0	0	-	-	81	32	3,711	1,267
Coastal District	0	0	0.0	0.0	109	25	33.8	5.7	137	39	60.5	8.5	32	29	67.5	3.6	0	0	0.0	0.0	278	93	14,134	2,602
Nunam Iqua ^b	4	3	64.7	9.5	10	3	37.3	27.2	13	10	41.6	9.1	8	6	107.7	14.3	0	0	-	-	35	22	2,034	627
Alakanuk	0	0	-	-	45	9	42.3	16.2	70	14	41.6	12.5	11	7	56.6	7.4	0	0	-	-	126	30	5,437	2,245
Emmonak	0	0	-	-	78	18	32.4	8.6	59	25	53.6	9.5	22	18	122.4	11.8	0	0	-	-	159	61	8,384	1,791
Kotlik	0	0	-	-	26	7	52.4	17.6	48	10	50.1	15.2	14	13	72.2	4.4	1	1	100.0	-	89	31	4,878	1,690
District 1	4	3	64.7	9.5	159	37	38.8	7.1	190	59	47.5	6.7	55	44	94.3	5.5	1	1	100.0	0.0	409	144	20,733	3,390
Mountain Village	1	1	16.0	-	46	10	38.1	11.7	85	22	47.8	9.9	15	14	82.1	5.7	0	0	-	-	147	47	7,064	1,968
Pitkas Point	0	0	-	-	6	4	22.3	11.4	3	8	29.5	9.6	6	4	52.5	9.0	0	0	-	-	25	16	832	298
St. Mary's	1	1	25.0	-	35	7	13.7	8.2	52	16	32.1	8.1	24	23	95.0	2.9	0	0	-	-	112	47	4,456	1,006
Pilot Station	0	0	-	-	41	12	10.0	3.4	41	20	28.9	5.9	14	11	63.6	8.3	1	1	79.0	-	97	44	2,563	593
Marshall	0	0	-	-	18	3	8.3	7.2	45	11	5.4	2.4	12	11	36.2	3.7	0	0	-	-	75	25	826	338
District 2	2	2	20.5	0.0	146	36	20.0	4.4	236	77	32.0	4.2	71	63	72.6	2.5	1	1	79.0	0.0	456	179	15,741	2,332
Russian Mission	0	0	-	-	20	5	5.6	3.2	39	11	1.6	0.8	2	2	7.0	0.0	0	0	-	-	61	18	190	139
Holy Cross	0	0	-	-	17	2	0.0	0.0	32	13	5.7	2.8	6	6	3.5	0.0	0	0	-	-	55	21	203	176
Shageluk	1	0	-	-	14	11	76.8	24.4	12	9	59.1	27.6	4	4	383.3	0.0	1	1	2189.0	-	32	25	5,507	931
District 3	1	0	0.0	0.0	51	18	23.3	6.8	83	33	11.5	4.1	12	12	130.7	0.0	1	1	2189.0	0.0	148	64	5,900	958
Anvik	0	0	-	-	16	12	1.5	0.5	12	10	1.7	0.3	4	4	190.0	0.0	0	0	-	-	32	26	804	17
Grayling	0	0	-	-	11	5	1.0	0.7	30	7	18.6	12.0	3	2	157.0	76.2	0	0	-	-	44	14	1,039	838
Kaltag	0	0	-	-	15	4	0.0	0.0	41	12	2.9	1.7	2	1	350.0	-	0	0	-	-	58	17	820	135
Nulato	1	0	-	-	42	7	0.0	0.0	46	10	3.7	2.1	2	2	5.0	0.0	0	0	-	-	91	19	180	194
Koyukuk	0	0	-	-	12	8	0.5	0.3	11	9	22.0	9.2	2	2	4.5	0.0	1	1	1099.0	-	26	20	1,356	199
Galena	2	0	-	-	105	26	2.2	1.7	53	13	1.1	0.7	5	4	40.3	17.7	1	0	-	-	166	43	489	392
Ruby	0	0	-	-	43	11	62.2	53.3	15	5	27.2	15.4	2	2	48.0	0.0	2	2	198.0	0.0	62	20	3,574	4,515
Huslia	0	0	-	-	49	8	12.3	11.2	25	7	158.9	82.8	3	2	145.0	60.6	1	1	1000.0	-	78	18	6,007	4,212
Hughes	0	0	-	-	9	8	0.0	0.0	7	6	0.7	0.3	4	4	309.5	0.0	0	0	-	-	20	18	1,243	3
Allakaket	0	0	-	-	29	6	4.0	1.8	15	4	155.0	127.1	2	2	211.0	0.0	2	2	729.0	0.0	48	14	4,321	3,738
Alatna	0	0	-	-	4	3	10.0	1.4	1	1	16.0	-	0	0	-	-	0	0	-	-	5	4	56	11
Bettles	0	0	-	-	19	13	0.0	0.0	0	0	-	-	0	0	-	-	0	0	-	-	19	13	0	0
District 4	3	0	0.0	0.0	354	111	10.5	6.7	256	84	30.8	11.1	29	25	149.7	10.5	7	6	564.7	0.0	649	226	19,889	7,283
Tanana	0	0	-	-	65	16	3.3	1.7	21	8	51.9	39.2	4	3	3.3	1.7	7	7	207.3	0.0	97	34	2,765	1,626
Rampart	1	1	0.0	-	5	4	0.0	0.0	7	6	0.3	0.1	3	3	1.0	0.0	1	0	-	-	17	14	5	2
Stevens Village	2	2	0.0	0.0	12	7	0.0	0.0	10	9	0.0	0.0	4	3	0.0	0.0	0	0	-	-	28	21	0	0
Birch Creek	1	0	-	-	6	6	0.0	0.0	2	2	0.0	0.0	0	0	-	-	0	0	-	-	9	8	0	0
Beaver	2	2	10.0	0.0	11	6	0.0	0.0	12	10	0.6	0.2	2	1	0.0	-	0	0	-	-	27	19	27	6
Fort Yukon	4	3	0.0	0.0	105	29	20.3	17.2	43	12	0.0	0.0	10	10	0.0	0.0	2	2	0.0	0.0	164	56	2,133	3,550
Venetie	3	3	0.0	0.0	21	20	0.0	0.0	10	9	0.0	0.0	1	1	0.0	-	1	1	0.0	-	36	34	0	0
Chalkyitsik	2	0	-	-	26	20	0.0	0.0	5	5	0.0	0.0	0	0	-	-	0	0	-	-	33	25	0	0
District 5	15	11	1.3	0.0	251	108	9.3	7.2	110	61	10.0	7.5	24	21	0.7	0.3	11	10	131.9	0.0	411	211	4,930	3,905
Survey Totals	25	16	12.8	1.5	1,070	335	18.7	3.1	1,012	353	34.4	3.5	223	194	82.6	2.1	21	19	370.1	0.0	2,351	917	81,327	9,639

^a The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).^b Formerly known as Sheldon or Sheldon Point.

Appendix A.7. Estimated fall chum salmon subsistence use by residents of surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003.^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total	n	Total	CI(95%) (+/-)
Hooper Bay	0	0	-	-	83	17	0.3	0.3	90	23	0.1	0.1	24	22	0.0	0.0	0	0	-	-	197	62	36	47
Scammon Bay	0	0	-	-	26	8	0.1	0.1	47	16	1.3	1.0	8	8	4.3	0.0	0	0	-	-	81	32	96	94
Coastal District	0	0	0.0	0.0	109	25	0.3	0.2	137	39	0.5	0.4	32	30	1.1	0.0	0	0	0.0	0.0	278	94	132	105
Nunam Iqua ^b	4	3	1.0	0.5	10	3	0.0	0.0	13	10	1.6	0.7	8	6	6.5	2.4	0	0	-	-	35	22	77	41
Alakanuk	0	0	-	-	45	9	3.0	2.7	70	14	4.6	1.8	11	7	0.3	0.2	0	0	-	-	126	30	458	342
Emmonak	0	0	-	-	78	18	2.5	1.5	59	25	4.7	1.9	22	18	5.9	1.1	0	0	-	-	159	61	602	323
Kotlik	0	0	-	-	26	7	4.7	2.7	48	10	0.9	0.5	14	13	18.8	2.7	1	1	0.0	-	89	31	430	164
District 1	4	3	1.0	0.5	159	37	2.8	1.2	190	59	3.5	0.9	55	44	8.2	0.9	1	1	0.0	0.0	409	144	1,567	500
Mountain Village	1	1	0.0	-	46	10	0.4	0.4	85	22	5.7	3.7	15	14	2.2	0.2	0	0	-	-	147	47	535	620
Pitkas Point	0	0	-	-	6	4	0.0	0.0	13	8	3.1	1.5	6	4	0.0	0.0	0	0	-	-	25	16	41	39
St. Mary's	1	1	0.0	-	35	7	5.0	3.2	52	16	6.8	3.4	24	23	10.6	1.3	0	0	-	-	112	47	780	414
Pilot Station	0	0	-	-	41	12	0.0	0.0	41	20	0.3	0.2	14	11	0.0	0.0	1	1	0.0	-	97	44	12	13
Marshall	0	0	-	-	18	3	0.0	0.0	45	11	4.2	2.3	12	11	16.0	2.4	0	0	-	-	75	25	380	213
District 2	2	2	0.0	0.0	146	36	1.3	0.8	236	77	4.6	1.6	71	63	6.7	0.6	1	1	0.0	0.0	456	179	1,748	776
Russian Mission	0	0	-	-	20	5	5.0	4.3	39	11	4.1	3.5	2	2	0.5	0.0	0	0	-	-	61	18	261	315
Holy Cross	0	0	-	-	17	2	0.0	0.0	32	13	0.0	0.0	6	6	1.5	0.0	0	0	-	-	55	21	9	0
Shageluk	1	0	-	-	14	11	2.7	0.6	12	10	6.9	2.4	4	4	0.0	0.0	1	1	0.0	-	32	26	121	58
District 3	1	0	0.0	0.0	51	18	2.7	1.7	83	34	2.9	1.7	12	12	0.8	0.0	1	1	0.0	0.0	148	65	391	320
Anvik	0	0	-	-	16	12	1.1	0.3	12	10	14.0	4.1	4	4	2.0	0.0	0	0	-	-	32	26	193	97
Grayling	0	0	-	-	11	5	5.0	3.7	30	7	13.0	5.0	3	2	10.0	5.8	0	0	-	-	44	14	475	308
Kaitag	0	0	-	-	15	4	0.0	0.0	41	12	4.6	2.6	2	1	40.0	-	0	0	-	-	58	17	268	210
Nulato	1	0	-	-	42	7	14.3	13.0	46	10	10.1	7.0	2	2	0.0	0.0	0	0	-	-	91	19	1,065	1,244
Koyukuk	0	0	-	-	12	8	5.5	2.2	11	9	2.9	1.2	2	2	27.0	0.0	1	1	641.0	-	26	20	793	58
Galena	2	0	-	-	105	26	3.8	1.6	53	13	12.2	6.1	5	4	60.0	16.9	1	0	-	-	166	43	1,352	730
Ruby	0	0	-	-	43	11	0.0	0.0	15	5	32.0	17.8	2	1	90.0	-	2	2	285.5	0.0	62	19	1,231	523
Hustla	0	0	-	-	49	8	0.0	0.0	25	7	51.4	42.2	3	2	0.0	0.0	1	1	500.0	-	78	18	1,786	2,070
Hughes	0	0	-	-	9	8	3.8	1.3	7	6	1.7	0.6	4	4	137.5	0.0	0	0	-	-	20	18	595	24
Allakaket	0	0	-	-	29	6	0.3	0.3	15	4	0.0	0.0	2	2	0.0	0.0	2	2	47.5	0.0	48	14	105	17
Aiatna	0	0	-	-	4	3	0.0	0.0	1	1	0.0	-	0	0	-	-	0	0	-	-	5	4	0	0
Bettles	0	0	-	-	19	13	0.2	0.1	0	0	-	-	0	0	-	-	0	0	-	-	19	13	4	5
District 4	3	0	0.0	0.0	354	111	3.4	1.6	256	84	14.3	4.7	29	24	41.4	3.0	7	6	258.1	0.0	649	225	7,867	2,606
Tanana	0	0	-	-	65	16	0.8	0.7	21	8	0.0	0.0	4	3	676.7	202.4	7	7	1663.0	0.0	97	34	14,396	1,589
Rampart	1	1	0.0	-	5	4	7.0	3.1	7	6	0.0	0.0	3	3	15.0	0.0	1	0	-	-	17	14	80	31
Stevens Village	2	2	0.0	0.0	12	7	72.9	46.0	10	9	0.0	0.0	4	3	0.0	0.0	0	0	-	-	28	21	874	1,081
Birch Creek	1	0	-	-	6	6	0.3	0.0	2	2	0.0	0.0	0	0	-	-	0	0	-	-	9	8	2	0
Beaver	2	2	0.0	0.0	11	6	0.0	0.0	12	10	11.0	3.0	2	1	0.0	-	0	0	-	-	27	19	132	71
Fort Yukon	4	3	33.3	16.7	105	29	21.3	11.0	43	12	15.7	8.5	10	10	150.7	0.0	2	2	1500.0	0.0	164	56	7,548	2,384
Venetie	3	3	4.7	0.0	21	20	4.3	0.6	10	9	18.7	3.8	1	1	10.0	-	1	1	500.0	-	36	34	801	79
Chalkyitsik	2	0	-	-	26	20	10.2	4.8	5	5	20.0	0.0	0	0	-	-	0	0	-	-	33	25	365	245
District 5	15	11	9.8	4.4	251	108	14.1	5.1	110	61	9.9	3.4	24	21	177.9	33.7	11	10	1376.5	0.0	411	211	24,198	3,074
Survey Totals	25	16	6.1	2.7	1,070	335	5.2	1.3	1,012	354	6.7	1.3	223	194	28.9	3.7	21	19	807.0	0.0	2,351	918	35,903	4,148

^a The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).^b Formerly known as Sheldon or Sheldon Point.

Appendix A.8. Estimated coho salmon subsistence use by residents of surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2003. ^a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
																					Total	Est	CI(95%)	
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Total	(+/-)
Hooper Bay	0	0	-	-	83	17	0.4	0.3	90	23	1.7	1.5	24	22	1.9	0.4	0	0	-	-	197	62	237	270
Scammon Bay	0	0	-	-	26	8	0.0	0.0	47	16	1.9	1.1	8	8	1.5	0.0	0	0	-	-	81	32	100	102
Coastal District	0	0	0.0	0.0	109	25	0.3	0.2	137	39	1.8	1.1	32	30	1.8	0.3	0	0	0.0	0.0	278	94	337	289
Nunam Iqua ^b	4	3	12.0	3.8	10	3	0.0	0.0	13	10	3.2	0.7	8	7	3.4	0.7	0	0	-	-	35	23	117	36
Alakanuk	0	0	-	-	45	9	1.7	1.5	70	14	2.5	1.5	11	7	0.3	0.1	0	0	-	-	126	30	253	240
Emmonak	0	0	-	-	78	18	1.5	0.9	59	25	2.4	1.3	22	18	2.2	0.8	0	0	-	-	159	61	307	204
Kotlik	0	0	-	-	26	7	0.1	0.1	48	10	1.5	0.7	14	13	16.8	3.0	1	1	11.0	-	89	31	323	104
District 1	4	3	12.0	3.8	159	37	1.2	0.6	190	59	2.3	0.7	55	45	5.7	0.8	1	1	11.0	0.0	409	145	1,000	334
Mountain Village	1	1	0.0	-	46	10	0.7	0.4	85	22	2.8	1.3	15	14	11.4	2.4	0	0	-	-	147	47	438	238
Pitkas Point	0	0	-	-	6	4	0.0	0.0	13	8	10.0	6.0	6	4	0.0	0.0	0	0	-	-	25	16	130	154
St. Mary's	1	1	0.0	-	35	7	2.3	1.4	52	16	3.6	1.9	24	23	1.6	0.2	0	0	-	-	112	47	306	218
Pilot Station	0	0	-	-	41	12	0.0	0.0	41	20	0.2	0.1	14	11	0.0	0.0	1	1	0.0	-	97	44	8	12
Marshall	0	0	-	-	18	3	0.0	0.0	45	11	0.1	0.1	12	11	3.5	0.5	0	0	-	-	75	25	46	14
District 2	2	2	0.0	0.0	146	36	0.8	0.4	236	77	2.4	0.7	71	63	3.5	0.5	1	1	0.0	0.0	456	179	928	358
Russian Mission	0	0	-	-	20	5	3.0	2.6	39	11	2.7	1.6	2	2	6.0	0.0	0	0	-	-	61	18	178	156
Holy Cross	0	0	-	-	17	2	0.0	0.0	32	13	0.9	0.6	6	6	1.0	0.0	0	0	-	-	55	21	36	37
Shageluk	1	0	-	-	14	11	0.5	0.3	12	10	1.0	0.4	4	4	0.0	0.0	1	1	15.0	-	32	26	35	12
District 3	1	0	0.0	0.0	51	18	1.3	1.0	83	34	1.8	0.8	12	12	1.5	0.0	1	1	15.0	0.0	148	65	249	161
Anvik	0	0	-	-	16	12	0.8	0.4	12	10	0.0	0.0	4	4	37.5	0.0	0	0	-	-	32	26	162	12
Grayling	0	0	-	-	11	5	7.6	5.6	30	7	11.1	6.1	3	2	17.0	4.0	0	0	-	-	44	14	469	381
Kalltag	0	0	-	-	15	4	3.3	2.2	41	12	4.8	1.5	2	1	100.0	-	0	0	-	-	58	17	444	141
Nulato	1	0	-	-	42	7	4.6	2.7	46	10	16.1	8.7	2	2	33.5	0.0	0	0	-	-	91	19	1,000	813
Koyukuk	0	0	-	-	12	8	0.0	0.0	11	9	27.2	11.6	2	2	0.0	0.0	1	1	849.0	-	26	20	1,148	250
Galena	2	0	-	-	105	26	0.6	0.4	53	13	13.8	9.5	5	4	8.5	2.3	1	0	-	-	166	43	837	992
Ruby	0	0	-	-	43	11	0.0	0.0	15	5	0.0	0.0	2	2	0.0	0.0	2	2	324.0	0.0	62	20	648	0
Huslia	0	0	-	-	49	8	0.8	0.7	25	7	1.4	1.2	3	2	125.0	72.2	1	1	0.0	-	78	18	447	434
Hughes	0	0	-	-	9	8	0.0	0.0	7	6	0.0	0.0	4	4	5.0	0.0	0	0	-	-	20	18	20	0
Allakaket	0	0	-	-	29	6	0.3	0.3	15	4	5.0	4.3	2	2	0.0	0.0	2	2	7.0	0.0	48	14	99	127
Alatna	0	0	-	-	4	3	0.3	0.2	1	1	7.0	-	0	0	-	-	0	0	-	-	5	4	8	1
Bettles	0	0	-	-	19	13	0.0	0.0	0	0	-	-	0	0	-	-	0	0	-	-	19	13	0	0
District 4	3	0	0.0	0.0	354	111	1.3	0.4	256	84	9.5	2.7	29	25	31.2	7.5	7	6	215.9	0.0	649	226	5,282	1,441
Tanana	0	0	-	-	65	16	0.6	0.4	21	8	3.8	2.1	4	3	0.0	0.0	7	7	480.3	0.0	97	34	3,481	102
Rampart	1	1	0.0	-	5	4	0.3	0.1	7	6	0.0	0.0	3	3	0.0	0.0	1	0	-	-	17	14	1	1
Stevens Village	2	2	0.0	0.0	12	7	0.0	0.0	10	9	0.0	0.0	4	3	0.0	0.0	0	0	-	-	28	21	0	0
Birch Creek	1	0	-	-	6	6	0.0	0.0	2	2	0.0	0.0	0	0	-	-	0	0	-	-	9	8	0	0
Beaver	2	2	0.0	0.0	11	6	0.0	0.0	12	10	0.0	0.0	2	1	0.0	-	0	0	-	-	27	19	0	0
Fort Yukon	4	3	6.7	3.3	105	29	2.1	1.2	43	12	0.8	0.6	10	10	0.0	0.0	2	2	0.0	0.0	164	56	280	256
Venetie	3	3	0.0	0.0	21	20	0.1	0.0	10	9	1.1	0.4	1	1	0.0	-	1	1	0.0	-	36	34	13	7
Chalkyitsik	2	0	-	-	26	20	0.1	0.0	5	5	0.6	0.0	0	0	-	-	0	0	-	-	33	25	4	1
District 5	15	11	1.8	0.9	251	108	1.0	0.5	110	61	1.2	0.5	24	21	0.0	0.0	11	10	305.6	0.0	411	211	3,779	276
Survey Totals	25	16	3.0	0.8	1,070	335	1.0	0.2	1,012	354	3.9	0.7	223	196	6.9	1.0	21	19	233.3	0.0	2,351	920	11,575	1,582

^a The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).^b Formerly known as Sheldon or Sheldon Point.

Appendix A.9. Estimated number of salmon given away by subsistence fishermen to another subsistence household and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2003.

Community	Total Households	Households Contacted ^a	Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
			Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total
Hooper Bay	197	61	115	53	1,942	639	0	0	7	9	2,064
Scammon Bay	81	32	226	168	140	128	3	5	59	94	428
Coastal District	278	93	341	176	2,082	651	3	5	66	94	2,492
Nunam Iqua ^b	35	23	23	17	78	59	0	0	0	0	101
Alakanuk	126	29	118	95	535	543	25	30	0	0	678
Emmonak	159	60	244	195	559	512	0	0	0	0	803
Kotlik	89	30	237	214	923	671	95	92	0	0	1,255
District 1	409	142	622	305	2,095	1,005	120	97	0	0	2,837
Mountain Village	147	47	218	224	940	956	0	0	4	7	1,162
Pitkas Point	25	17	52	48	67	58	8	10	3	4	130
St. Mary's	112	44	40	45	328	212	50	88	30	53	448
Pilot Station	97	44	55	64	170	137	0	0	0	0	225
Marshall	75	23	453	490	25	15	10	18	3	2	491
District 2	456	175	818	546	1,530	991	68	90	40	53	2,456
Russian Mission	61	18	182	188	20	34	0	0	0	0	202
Holy Cross	55	21	209	208	5	7	0	0	5	7	219
Shageluk	32	25	87	43	1,020	64	16	13	8	7	1,131
District 3	148	64	478	284	1,045	73	16	13	13	10	1,552
Anvik	32	26	125	55	147	10	15	10	150	0	437
Grayling	44	13	180	127	0	0	85	95	0	0	265
Kaitag	58	17	168	170	0	0	0	0	25	31	193
Nulato	91	19	300	356	0	0	46	80	72	106	418
Koyukuk	26	20	184	75	128	102	0	0	0	0	312
Galena	166	42	605	334	210	359	384	345	0	0	1,199
Ruby	62	19	58	40	2,794	4,496	0	0	0	0	2,852
Huslia	78	18	612	521	75	81	0	0	72	89	759
Hughes	20	18	17	5	0	0	134	22	0	0	151
Allakaket	48	14	34	20	48	84	0	0	0	0	82
Alatna	5	4	11	6	20	11	0	0	1	1	32
Bettles	19	13	20	10	0	0	4	5	0	0	24
District 4	649	223	2,314	752	3,422	4,513	668	368	320	142	6,724
Tanana	97	34	213	91	81	138	515	465	119	102	928
Rampart	17	13	14	6	0	0	35	31	1	1	50
Stevens Village	28	18	70	26	0	0	17	22	0	0	87
Birch Creek	9	8	9	0	0	0	0	0	0	0	9
Beaver	27	19	208	195	20	0	0	0	0	0	228
Fort Yukon	164	56	870	261	0	0	358	210	36	54	1,264
Venetie	36	34	20	4	0	0	36	4	2	1	58
Chalkyitsik	33	25	73	14	0	0	45	4	0	0	118
District 5	411	207	1,477	340	101	138	1,006	511	158	116	2,742
Survey Totals	2,351	904	6,050	1,088	10,275	4,776	1,881	644	597	213	18,803

^a The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species

^b Formerly known as Sheldon or Sheldon Point.

Appendix A.10. Estimated number of salmon given away by commercial fishermen to another subsistence household and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2003.

Community	Total Households	Households Contacted ^a	Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
			Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total
Hooper Bay	197	62	0	0	0	0	0	0	0	0	0
Scammon Bay	81	32	0	0	0	0	0	0	0	0	0
Coastal District	278	94	0	0	0	0	0	0	0	0	0
Nunam Iqua ^b	35	23	0	0	0	0	0	0	0	0	0
Alakanuk	126	29	5	9	20	35	30	53	0	0	55
Emmonak	159	60	0	0	0	0	0	0	0	0	0
Kotlik	89	30	0	0	0	0	0	0	0	0	0
District 1	409	142	5	9	20	35	30	53	0	0	55
Mountain Village	147	47	0	0	0	0	0	0	0	0	0
Pitkas Point	25	17	0	0	0	0	0	0	0	0	0
St. Mary's	112	44	0	0	0	0	0	0	0	0	0
Pilot Station	97	44	0	0	0	0	0	0	0	0	0
Marshall	75	23	0	0	0	0	0	0	0	0	0
District 2	456	175	0	0	0	0	0	0	0	0	0
Russian Mission	61	18	0	0	0	0	0	0	0	0	0
Holy Cross	55	21	0	0	0	0	0	0	0	0	0
Shageluk	32	24	0	0	0	0	0	0	0	0	0
District 3	148	63	0	0	0	0	0	0	0	0	0
Anvik	32	26	0	0	0	0	0	0	0	0	0
Grayling	44	13	0	0	0	0	0	0	0	0	0
Kaltag	58	17	0	0	0	0	0	0	0	0	0
Nulato	91	19	0	0	0	0	0	0	0	0	0
Koyukuk	26	20	0	0	0	0	0	0	0	0	0
Galena	166	42	0	0	0	0	0	0	0	0	0
Ruby	62	19	0	0	0	0	0	0	0	0	0
Huslia	78	18	0	0	0	0	0	0	0	0	0
Hughes	20	18	0	0	0	0	0	0	0	0	0
Allakaket	48	14	0	0	0	0	0	0	0	0	0
Alatna	5	4	0	0	0	0	0	0	0	0	0
Bettles	19	13	0	0	0	0	0	0	0	0	0
District 4	649	223	0	0	0	0	0	0	0	0	0
Tanana	97	34	0	0	0	0	0	0	0	0	0
Rampart	17	13	0	0	0	0	0	0	0	0	0
Stevens Village	28	18	0	0	0	0	0	0	0	0	0
Birch Creek	9	8	0	0	0	0	0	0	0	0	0
Beaver	27	19	0	0	0	0	0	0	0	0	0
Fort Yukon	164	56	0	0	0	0	0	0	0	0	0
Venetie	36	34	0	0	0	0	0	0	0	0	0
Chalkyitsik	33	25	0	0	0	0	0	0	0	0	0
District 5	411	207	0	0	0	0	0	0	0	0	0
Survey Totals	2,351	904	5	9	20	35	30	53	0	0	55

^a The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species

^b Formerly known as Sheldon or Sheldon Point.

Appendix A.11. Estimated total number of salmon provided to villages for subsistence use by test fish programs, Yukon Area, 2003.

Yukon River Test Fishery Sites	Village where fish were distributed	Chinook Salmon	Summer Chum Salmon	Fall Chum Salmon	Coho Salmon
Lower Yukon Test Fish Drift Gillnet ^a	Emmonak	337	1,574	1,129	504
	Kotlik	30	127	118	131
	Alakanuk	7	100	0	0
LYTF Project Subtotal:		374	1,801	1,247	635
Mountain Village Test Drift Gillnet	Mountain Village	-	-	328	362
Pilot Station Test Drift Gillnet	Pilot Station	846	2,060	823	371
Kaltag Test Drift Gillnet	Kaltag	-	-	457	23
Russian Mission Tag Deployment Drift Gillnet	Russian Mission	33	5	-	-
Rampart Test Drift Gillnet	Tanana ^b	-	-	523	-
	Rampart	-	-	350	-
Rampart Test Drift Gillnet Project Subtotal:		0	0	873	0
Reported Test Fish Catch Total		1,253	3,866	3,728	1,391
Test Fish Catch Added to Survey Estimates Totals ^c		1,253	3,866	3,205	1,391

^a Includes both summer and fall seasons and may include some fish from the summer season set gillnet test fishery.

^b Rampart test drift gillnet fish were reported as part of subsistence fall chum salmon harvest estimate in the village of Tanana.

^c Test fish catch totals as reported in Table 1.

Appendix A.12. Reported salmon lost for human consumption in surveyed communities due to sick fish, weather, predators, and unknown causes, Yukon Area, 2003.

Salmon Lost For Human Consumption												Total Reported Salmon Lost	
Reasons Given For Salmon Lost	Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Pink Salmon				
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Ichthyophonus h.	625	67.6%	390	20.5%	863	94.9%	0	0.0%	0	0.0%	1,878	49.6%	
Other fish with blemishes and sores	12	1.3%	7	0.4%	0	0.0%	0	0.0%	0	0.0%	11	0.3%	
LOST TO SICK FISH	Subtotal	637	68.9%	421	22.1%	873	96.0%	0	0.0%	0	0.0%	1,931	50.9%
Wet weather	0	0.0%	40	2.1%	0	0.0%	0	0.0%	0	0.0%	40	1.1%	
Rain/Sun Spoilage	37	4.0%	423	22.2%	0	0.0%	0	0.0%	0	0.0%	460	12.1%	
Bad weather	17	1.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	17	0.4%	
Mold on rack	8	0.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	8	0.2%	
Unplugged the Freezer	3	0.3%	0	0.0%	0	0.0%	4	17.4%	0	0.0%	7	0.2%	
Ruined	3	0.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	0.1%	
LOST TO WEATHER / SPOILAGE	Subtotal	68	7.4%	463	24.3%	0	0.0%	4	17.4%	0	0.0%	535	14.1%
Lost to dogs	1	0.1%	31	1.6%	0	0.0%	5	21.7%	0	0.0%	37	1.0%	
Bears	50	5.4%	146	7.7%	10	1.1%	0	0.0%	0	0.0%	206	5.4%	
Birds	19	2.1%	103	5.4%	5	0.6%	10	43.5%	0	0.0%	137	3.6%	
Flies	18	1.9%	173	9.1%	0	0.0%	0	0.0%	20	69.0%	211	5.6%	
LOST TO ANIMALS	Subtotal	88	9.5%	453	23.8%	15	1.7%	15	65.2%	20	69.0%	591	15.6%
LOST UNKNOWN	Subtotal	131	14.2%	568	29.8%	21	2.3%	4	17.4%	9	31.0%	733	19.3%
SALMON LOST BY SPECIES	TOTAL	924	100%	1,905	100%	909	100%	23	100%	29	100%	3,790	100%
PERCENT SALMON LOST BY SPECIES		24.4%		50.3%		24.0%		0.6%		0.8%		3,790	

APPENDIX B

YUKON RIVER DRAINAGE HISTORICAL SUBSISTENCE AND PERSONAL USE SALMON HARVESTS

Appendix B.1 Chinook salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1992-2003.

Community	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	1993-1997 Average	1998-2002 Average
Hooper Bay	503	230	157	1,500	1,127	613	13	173	114	2,150	282	722	725	546
Scammon Bay	948	1,199	668	585	1,238	526	378	938	449	732	840	1,128	843	667
Coastal District Subtotal	1,451	1,429	825	2,085	2,365	1,139	391	1,111	563	2,882	1,122	1,850	1,569	1,214
Nunam Iqua	388	561	606	459	450	970	527	855	684	550	393	925	609	602
Alakanuk	623	2,562	1,045	1,191	662	2,058	1,930	1,236	1,109	973	1,773	1,707	1,504	1,404
Emmonak	2,336	4,372	2,384	1,711	702	3,080	2,396	3,337	2,205	2,473	1,751	2,763	2,450	2,432
Kotlik	1,794	2,913	2,505	2,599	1,832	1,442	2,389	1,420	1,893	3,093	1,686	937	2,258	2,096
District 1 Subtotal	5,141	10,408	6,540	5,960	3,646	7,550	7,242	6,848	5,891	7,089	5,603	6,332	6,821	6,535
Mountain Village	1,249	3,217	1,511	1,542	1,315	2,081	2,533	2,162	1,715	1,864	1,523	2,174	1,933	1,959
Pitkas Point	851	1,001	469	559	762	793	817	632	753	651	566	633	717	684
St. Marys	1,753	2,042	2,722	2,031	1,766	2,592	2,679	2,150	1,810	3,815	2,045	1,916	2,231	2,500
Pilot Station	1,818	2,661	1,977	1,614	1,811	2,373	1,715	2,715	2,378	2,614	2,530	2,886	2,087	2,390
Marshall	1,403	2,592	2,277	3,291	2,126	1,511	1,711	2,780	3,279	4,498	2,290	2,059	2,359	2,912
District 2 Subtotal	7,074	11,513	8,956	9,037	7,780	9,350	9,455	10,439	9,935	13,442	8,954	9,668	9,327	10,445
Russian Mission	1,282	3,273	1,793	2,450	2,709	1,459	1,314	2,722	1,860	3,428	1,887	2,057	2,337	2,242
Holy Cross	3,491	3,191	4,040	2,808	3,953	3,472	2,648	4,581	1,249	2,711	1,813	2,395	3,493	2,600
Shageluk	218	128	291	161	121	1,380	552	412	805	222	439	550	416	486
District 3 Subtotal	4,991	6,592	6,124	5,419	6,783	6,311	4,514	7,715	3,914	6,361	4,139	5,002	6,246	5,329
Lower Yukon River Total	17,206	28,513	21,620	20,416	18,209	23,211	21,211	25,002	19,740	26,892	18,696	21,002	22,394	22,308
Anvik	389	663	424	450	768	951	1,025	776	205	608	708	1,286	651	664
Grayling	1,074	1,045	1,843	1,340	1,036	2,391	2,177	2,476	839	1,077	2,249	1,613	1,531	1,764
Kaltag	1,084	1,260	1,653	1,890	994	1,036	1,870	2,051	1,074	1,506	1,435	1,838	1,367	1,587
Nulato	1,596	1,660	1,735	1,533	1,461	1,576	4,147	1,799	1,083	2,127	1,773	2,531	1,593	2,186
Koyukuk	510	853	589	146	402	851	800	506	175	449	323	860	568	451
Galena	1,870	1,732	1,834	1,336	2,770	2,350	1,668	2,539	788	1,755	1,522	3,112	2,004	1,654
Ruby/Kokrines	498	3,263	1,539	1,435	557	2,260	3,891	777	1,577	2,033	954	631	1,811	1,846
District 4 Yukon River Subtotal (Excluding the Koyukuk River)	7,021	10,476	9,617	8,130	7,988	11,415	15,578	10,924	5,741	9,555	8,964	11,871	9,525	10,152
Huslia	751	232	239	932	67	57	23	90	424	377	222	469	305	227
Hughes	29	88	107 ^a	77	54	34	91	105	50	144	67	113	72	91
Allakaket	395	135	338 ^a	321	82	423	85	108	41	76	200	306	260	102
Alatna	42	4	26 ^a	10	2	38	4	10	8	0	3	12	16	5
Bettles	53	1	0	4	0	39	20	1	0	0	0	0	9	4
Koyukuk River Subtotal	1,270	460	710	1,344	205	591	223	314	523	597	492	900	662	430
District 4 Subtotal	8,291	10,936	10,327	9,474	8,193	12,006	15,801	11,238	6,264	10,152	9,456	12,771	10,187	10,582

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Community	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	1993-1997 Average	1998-2002 Average
Tanana	2,477	3,362	2,999	2,398	2,741	3,596	5,212	3,388	2,895	4,112	2,379	5,332	3,019	3,597
Rampart	2,802	1,956	1,354	1,461	1,751	2,203	885	2,018	847	1,857	852	1,411	1,745	1,292
Fairbanks ^b	1,394	1,514	1,920	1,447	1,166	955	1,231	851	1,342	1,125	1,767	1,932	1,400	1,263
Stevens Village	1,887	1,754	2,814	2,674	681	2,070	1,232	1,214	466	1,111	1,334	1,121	1,999	1,071
Birch Creek	44	0	119	93	0	373	48	24	72	0	67	78	117	42
Beaver	1,564	1,557	850	1,021	886	1,859	470	473	196	1,368	702	1,156	1,235	642
Fort Yukon	4,122	6,361	4,727	3,132	4,957	3,145	1,771	2,539	988	2,361	2,348	4,004	4,464	2,001
Circle	1,585	745	1,377	1,145	1,781	1,091	685	524	627	447	1,533	895	1,228	763
Central	167	210	240	171	131	146	170	91	26	84	58	144	180	86
Eagle	1,040	753	1,234	1,886	1,092	1,534	2,473	2,558	1,087	1,033	1,910	2,081	1,300	1,812
Other ^c	571	437	602	1,004	377	763	446	488	205	40	348	862	637	305
District 5 Yukon River Subtotal (Excluding Chandalar/Black Rivers)	17,653	18,649	18,236	16,432	15,563	17,735	14,623	14,168	8,751	13,538	13,298	19,016	17,323	12,876
Venetie	35	2,716	524	434	134	314	168	127	103	28	77	125	824	101
Chaikylitsik	3	0	0	0	30	0	11	35	0	0	26	50	6	14
Chandalar/Black Rivers Subtotal	38	2,716	524	434	164	314	179	162	103	28	103	175	830	115
District 5 Subtotal	17,691	21,365	18,760	16,866	15,727	18,049	14,802	14,330	8,854	13,566	13,401	19,191	18,153	12,991
Manley	551	238	480	335	134	242	209	136	58	534	336	213	286	255
Minto	142	468	316	535	523	1,208	275	317	0	197	19	317	610	162
Nenana	1,267	693	759	607	423	1,082	1,187	975	541	1,405	509	1,193	713	923
Fairbanks ^d	402	273	775	285	97	176	230	195	360	313	159	392	321	251
Other ^e	76	0	40	17	0	4	18	1	24	0	44	30	12	17
District 6 Tanana River Subtotal	2,438	1,672	2,370	1,779	1,177	2,712	1,919	1,624	983	2,449	1,067	2,145	1,942	1,608
Upper Yukon River Total	28,420	33,973	31,457	28,119	25,097	32,767	32,522	27,192	16,101	26,167	23,924	34,107	30,283	25,181
Alaska, Yukon River Total ^f	45,626	62,486	53,077	48,535	43,306	55,978	53,733	52,194	35,841	53,059	42,620	55,109	52,676	47,489
Alaska, Yukon Area Total	47,077	63,915	53,902	50,620	45,671	57,117	54,124	53,305	36,404	55,941	43,742	56,959	54,245	48,703

^a Due to floods in 1994, Hughes, Allakaket, and Alatna were not surveyed. The 1994 Chinook salmon harvest is estimated based on a five-year-average, 1989-1993.

^b Harvests by Fairbanks subsistence permit holders who fished in District 5 near the Yukon River bridge crossing.

^c Other permit holders who fished in District 5 but did not reside in the communities listed.

^d Harvests by Fairbanks subsistence permit holders who fished in the Tanana River.

^e Other permit holders who fished in District 6 but did not reside in the communities listed.

^f Does not include the Coastal District.

Appendix B.2 Summer chum salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1992-2003.

Community	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	1993-1997 Average	1998-2002 Average
Hooper Bay	12,900	16,106	10,556	13,374	15,870	12,310	261	10,146	9,301	12,593	9,780	10,658	13,643	8,416
Scammon Bay	3,795	4,692	4,347	3,986	6,365	3,401	1,101	3,315	3,876	1,323	5,016	3,310	4,558	2,926
Coastal District Subtotal	16,695	20,798	14,903	17,360	22,235	15,711	1,362	13,461	13,177	13,916	14,796	13,968	18,201	11,342
Nunam Iqua	1,415	2,362	1,941	2,979	2,634	2,603	1,872	1,343	3,309	1,942	1,897	2,561	2,504	2,073
Alakanuk	9,951	8,935	5,947	10,538	6,171	7,443	5,643	3,808	6,259	5,992	7,637	5,287	7,807	5,868
Emmonak	12,296	15,568	13,060	11,696	6,097	12,399	9,558	10,310	8,338	8,242	8,458	7,644	11,764	8,981
Kotlik	9,577	7,121	11,197	9,777	12,387	4,803	9,815	4,708	6,173	6,595	6,115	4,209	9,057	6,681
District 1 Subtotal	33,239	33,986	32,145	34,990	27,289	27,248	26,888	20,169	24,079	22,771	24,107	19,701	31,132	23,603
Mountain Village	7,864	10,505	3,938	10,554	9,285	11,310	9,596	10,059	7,074	8,484	6,657	6,497	9,118	8,374
Pitkas Point	759	1,481	1,103	1,665	1,619	747	1,302	849	1,728	862	639	800	1,323	1,076
St. Marys	7,796	5,925	10,128	5,950	6,736	8,874	9,047	6,752	8,094	10,026	7,284	4,521	7,523	8,241
Pilot Station	6,236	5,641	5,450	4,427	6,355	4,532	5,042	5,265	5,223	5,329	6,490	4,163	5,281	5,470
Marshall	2,076	1,745	2,288	4,594	4,431	1,508	1,293	1,212	3,212	1,602	2,484	792	2,913	1,961
District 2 Subtotal	24,731	25,297	22,907	27,190	28,426	26,971	26,280	24,137	25,331	26,303	23,554	16,773	26,158	25,121
Russian Mission	3,331	1,838	801	3,653	3,554	585	702	616	1,318	165	395	171	2,086	639
Holy Cross	1,001	1,517	1,479	948	1,700	487	269	264	569	460	155	214	1,226	343
Shageluk	5,267	4,183	6,212	7,542	6,114	9,244	5,501	4,868	1,800	684	1,956	5,473	6,659	2,962
District 3 Subtotal	9,599	7,538	8,492	12,143	11,368	10,316	6,472	5,748	3,687	1,309	2,506	5,858	9,971	3,944
Lower Yukon River Total	67,569	66,821	63,544	74,323	67,083	64,535	59,640	50,054	53,097	50,383	50,167	42,332	67,261	52,668
Anvik	1,142	1,735	907	9	185	6,306	2,139	848	425	94	1,089	844	1,828	919
Grayling	3,605	1,137	1,418	3,385	587	2,446	4,032	4,126	474	92	1,311	1,072	1,795	2,007
Kaltag	1,204	1,116	3,683	139	31	73	175	625	169	10	234	1,028	1,008	243
Nulato	889	15	975	228	1,003	115	3,518	1,945	377	208	269	180	467	1,263
Koyukuk	1,130	230	2,039	315	41	739	1,819	197	204	118	426	1,339	673	553
Galena	3,232	2,477	1,198	1,954	3,902	4,575	2,333	1,688	820	53	712	289	2,821	1,121
Ruby/Kokrines	2,420	1,459	4,586	4,445	2,016	3,286	2,251	1,697	1,233	1,025	1,406	876	3,158	1,522
District 4 Yukon River Subtotal (Excluding the Koyukuk River)	13,622	8,169	14,806	10,475	7,765	17,540	16,267	11,126	3,702	1,600	5,447	5,628	11,751	7,628
Huslia	13,670	8,343	6,014	4,885	2,372	840	449	1,192	745	833	3,178	6,187	4,491	1,279
Hughes	1,625	827	1,581 ^a	2,448	1,411	1,579	334	577	1,079	551	1,089	1,265	1,569	726
Allakaket	6,368	2,651	4,693 ^a	6,396	4,668	3,916	901	2,245	1,520	1,604	6,242	4,383	4,465	2,502
Alatna	490	52	365 ^a	140	209	145	13	99	0	0	15	50	182	25
Bettles	37	34	45	740	0	210	82	100	0	0	0	0	206	36
Koyukuk River Subtotal	22,190	11,907	12,698	14,609	8,660	6,690	1,779	4,213	3,344	2,988	10,524	11,885	10,913	4,570
District 4 Subtotal	35,812	20,076	27,504	25,084	16,425	24,230	18,046	15,339	7,046	4,588	15,971	17,513	22,664	12,198

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Appendix B.2. (page 2 of 2)

Community	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	1993-1997 Average	1998-2002 Average
Tanana	4,553	4,245	7,022	3,660	5,190	2,526	1,966	1,214	2,848	1,407	3,321	3,075	4,529	2,151
Rampart	4,494	1,489	559	1,168	1,188	738	19	60	47	0	14	9	1,028	28
Fairbanks ^b	706	465	360	722	2,958	424	57	346	275	165	295	89	986	228
Stevens Village	460	653	459	158	530	191	171	26	50	0	12	0	398	52
Beaver	12	134	655	36	572	2	15	91	7	328	77	7	280	104
Fort Yukon ^c	1,700	3,830	2,043	998	26	134	30	0	0	289	1,832	2,176	1,406	430
Circle	265	83	98	70	271	257	1	60	109	6	5	85	156	36
Central	91	2	8	2	53	25	1	0	1	0	0	0	18	0
Eagle	23	32	38	57	105	17	52	271	121	555	24	104	50	205
Other ^d	291	24	21	232	616	130	2	42	51	0	17	0	205	22
District 5 Yukon River Subtotal (Excluding Chandalar/Black Rivers)	12,595	10,957	11,263	7,103	11,509	4,444	2,314	2,110	3,509	2,750	5,597	5,545	9,055	3,256
Venetie	0	129	567	552	0	76	0	166	0	106	13	0	265	57
Chalkyitsik	17	0	0	0	0	0	0	0	132	0	0	0	0	26
Chandalar/Black Rivers Subtotal	17	129	567	552	0	76	0	166	132	106	13	0	265	83
District 5 Subtotal	12,612	11,086	11,830	7,655	11,509	4,520	2,314	2,276	3,641	2,856	5,610	5,545	9,320	3,339
Manley	850	1,310	1,405	1,657	1,219	576	211	272	240	338	93	65	1,233	231
Minto	625	367	509	1,320	1,421	1,056	148	173	3	19	10	625	935	71
Nenana	6,372	5,019	1,352	5,043	4,411	1,899	5,041	1,894	775	19	360	2,193	3,545	1,618
Fairbanks ^e	1,342	97	3,693	3,528	392	271	604	315	90	182	47	31	1,596	248
Other ^f	315	0	67	113	43	22	0	0	3	0	2	0	49	1
District 6 Tanana River Subtotal	9,504	6,793	7,026	11,661	7,486	3,824	6,004	2,654	1,111	558	512	2,914	7,358	2,168
Upper Yukon River Total	57,928	37,955	46,360	44,400	35,420	32,574	26,364	20,269	11,798	8,002	22,093	25,972	39,342	17,705
Alaska, Yukon River Total ^g	125,497	104,776	109,904	118,723	102,503	97,109	86,004	70,323	64,895	58,385	72,260	68,304	106,603	70,373
Alaska, Yukon Area Total	142,192	125,574	124,807	136,083	124,738	112,820	87,366	83,784	78,072	72,301	87,056	82,272	124,804	81,716

^a Due to floods in 1994, Hughes, Allakaket, and Alatna were not surveyed. The 1994 summer chum salmon harvest is estimated based on a five-year-average, 1989-1993.

^b Harvests by Fairbanks subsistence permit holders who fished in District 5 near the Yukon River bridge crossing.

^c Includes Birch Creek harvest of one summer chum salmon in 1997.

^d Other permit holders who fished in District 5 but did not reside in the communities listed.

^e Harvests by Fairbanks subsistence permit holders who fished in the Tanana River.

^f Other permit holders who fished in District 6 but did not reside in the communities listed.

^g Does not include the Coastal District.

Appendix B.3 Fall chum salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1992-2003.

Community	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	1993-1997 Average	1998-2002 Average
Hooper Bay	127	113	284	207	392	0	0	0	78	364	44	40	199	97
Scammon Bay	79	7	63	147	0	0	34	204	11	195	240	106	43	137
Coastal District Subtotal	206	120	347	354	392	0	34	204	89	559	284	146	243	234
Nunam Iqua	490	158	25	256	21	337	266	115	105	176	284	127	159	189
Alakanuk	401	182	73	631	100	900	665	558	505	1,032	222	348	377	596
Emmonak	1,628	1,507	3,441	1,614	1,501	1,039	867	1,849	1,165	1,272	1,261	1,257	1,820	1,283
Kotlik	2,697	5,923	1,348	2,197	2,525	856	1,365	3,980	3,519	957	114	407	2,570	1,987
District 1 Subtotal	5,216	7,770	4,887	4,698	4,147	3,132	3,163	6,502	5,294	3,437	1,881	2,139	4,927	4,055
Mountain Village	1,052	1,113	797	1,347	1,366	2,698	2,031	1,968	313	470	478	873	1,464	1,052
Pitkas Point	77	268	294	99	603	178	233	53	5	34	16	49	288	68
St. Marys	2,356	440	1,062	542	658	310	416	722	255	227	103	762	602	345
Pilot Station	1,170	1,017	1,527	575	448	1,106	1,162	1,155	852	1,522	680	823	935	1,074
Marshall	2,727	256	471	754	2,212	388	640	696	0	1,003	341	394	816	536
District 2 Subtotal	7,382	3,094	4,151	3,317	5,287	4,680	4,482	4,594	1,425	3,256	1,618	2,901	4,106	3,075
Russian Mission	648	172	11	865	587	0	137	100	37	76	164	615	327	103
Holy Cross	845	1,066	665	681	1,814	420	1,095	239	523	624	0	9	929	496
Shageluk	865	211	186	126	305	367	329	76	38	0	0	114	239	89
District 3 Subtotal	2,358	1,449	862	1,672	2,706	787	1,561	415	598	700	164	738	1,495	688
Lower Yukon River Total	14,956	12,313	9,900	9,687	12,140	8,599	9,206	11,511	7,317	7,393	3,663	5,778	10,528	7,818
Anvik	894	420	155	269	457	514	388	126	175	29	401	179	363	224
Grayling	2,993	2,083	811	1,155	1,759	1,531	648	1,370	284	314	52	441	1,468	534
Kaltag	2,522	704	630	644	1,049	1,142	499	764	190	607	314	725	834	475
Nulato	1,910	571	1,109	1,137	2,299	697	367	2,338	0	151	0	1,341	1,163	571
Koyukuk	2,817	2,052	1,049	814	2,458	1,954	1,583	1,544	239	517	255	835	1,665	828
Galena	2,393	3,255	3,963	3,202	6,620	3,370	1,915	1,932	564	420	349	1,510	4,082	1,036
Ruby/Kokrines	4,499	1,085	5,553	4,695	561	2,195	2,427	907	64	581	78	2,331	2,818	811
District 4 Yukon River Subtotal (Excluding the Koyukuk River)	18,028	10,170	13,270	11,916	15,203	11,403	7,827	8,981	1,516	2,619	1,449	7,362	12,392	4,478
Huslia	1,286	258	55	1,035	298	10	0	89	35	683	0	1,786	331	161
Hughes	325	169	0 ^a	263	274	51	60	84	157	0	0	497	151	60
Allakaket	1,452	233	0 ^a	260	961	270	11	20	36	50	100	105	345	43
Alatna	127	2	0 ^a	0	0	0	0	0	15	0	0	0	0	3
Bettles	14	0	0	583	50	0	0	0	0	0	0	0	127	0
Koyukuk River Subtotal	3,204	662	55	2,141	1,583	331	71	193	243	733	100	2,388	954	268
District 4 Subtotal	21,232	10,832	13,325	14,057	16,786	11,734	7,898	9,174	1,759	3,352	1,549	9,750	13,347	4,746

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Community	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	1993-1997 Average	1998-2002 Average
Tanana	19,365	23,103	34,681	14,409	21,420	25,058	24,956	22,305	9,384	9,779	6,255	14,308	23,734	14,536
Rampart	5,701	3,272	1,007	1,403	896	646	100	4,324	0	183	0	365	1,445	921
Fairbanks ^b	2,491	930	2,870	2,184	2,727	491	96	681	8	0	0	105	1,840	157
Stevens Village	150	862	45	3,194	991	1,585	1,076	20	10	20	0	857	1,335	225
Beaver	361	692	2,069	1,231	9	243	409	16	0	21	1	192	849	89
Ft. Yukon ^c	2,284	2,380	6,827	9,196	8,144	6,119	3,035	9,702	355	2,209	3,523	7,963	6,533	3,765
Circle	6,279	349	4,581	5,102	5,308	3,707	37	2,722	0	2,588	74	499	3,809	1,084
Central	100	0	0	0	132	0	0	0	0	0	0	0	26	0
Eagle	5,630	2,070	8,263	13,115	14,916	14,488	543	11,292	32	2,714	339	2,871	10,570	2,984
Other ^d	0	1,750	0	830	505	421	50	65	1	0	100	0	701	43
District 5 Yukon River Subtotal (Excluding Chandalar/Black Rivers)	42,361	35,408	60,343	50,664	55,048	52,758	30,302	51,127	9,790	17,514	10,292	27,160	50,844	23,805
Venetie	3,066	7,881	4,302	6,085	7,195	1,564	658	2,011	130	3,286	680	770	5,405	1,353
Chalkyitsik	274	475	1,751	845	1,230	936	433	442	0	73	4	340	1,047	190
Chandalar/Black Rivers Subtotal	3,340	8,356	6,053	6,930	8,425	2,500	1,091	2,453	130	3,359	684	1,110	6,453	1,543
District 5 Subtotal	45,701	43,764	66,396	57,594	63,473	55,258	31,393	53,580	9,920	20,873	10,976	28,270	57,297	25,348
Manley	7,010	3,215	13,722	20,272	10,662	5,887	4,411	5,172	0	1,230	947	1,303	10,752	2,352
Minto	3,017	301	1,419	4,782	4,381	2,361	505	781	2	251	100	675	2,649	328
Nenana	13,253	5,929	11,201	15,500	14,207	3,799	6,781	5,619	8	999	1,070	7,802	10,127	2,895
Fairbanks ^e	1,394	56	5,006	6,384	5,736	4,031	960	1,630	0	201	229	1,949	4,243	604
Other ^f	1,039	352	2,249	2,230	1,481	3,472	1,713	2,269	300	855	856	1,257	1,957	1,199
District 6 Tanana River Subtotal	25,713	9,853	33,597	49,168	36,467	19,550	14,370	15,471	310	3,536	3,202	12,986	29,727	7,378
Upper Yukon River Total	92,646	64,449	113,318	120,819	116,726	86,542	53,661	78,225	11,989	27,761	15,727	51,006	100,371	37,473
Alaska, Yukon River Total ^g	107,602	76,762	123,218	130,506	128,866	95,141	62,867	89,736	19,306	35,154	19,390	56,784	110,899	45,291
Alaska, Yukon Area Total	107,808	76,882	123,565	130,860	129,258	95,141	62,901	89,940	19,395	35,713	19,674	56,930	111,141	45,525

^a Due to floods in 1994, Hughes, Allakaket, and Alatna were not surveyed and the estimated harvest of fall chum salmon was zero.

^b Harvests by Fairbanks subsistence permit holders who fished in District 5 near the Yukon River bridge crossing.

^c Includes Birch Creek harvest of zero fall chum salmon for all years surveyed.

^d Other permit holders who fished in District 5 but did not reside in the communities listed.

^e Harvests by Fairbanks subsistence permit holders who fished in the Tanana River.

^f Other permits holders who fished in District 6 but did not reside in the communities listed.

^g Does not include the Coastal District.

Appendix B.4 Coho salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1992-2003.

Community	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	1993-1997 Average	1998-2002 Average
Hooper Bay	28	0	1	48	92	0	145	68	218	439	125	244	28	199
Scammon Bay	31	40	80	104	0	0	204	0	4	63	123	48	45	79
Coastal District Subtotal	59	40	81	152	92	0	349	68	222	502	248	292	73	278
Nunam Iqua	441	78	52	419	138	51	229	51	5	32	56	117	148	75
Alakanuk	966	138	94	658	103	882	292	108	84	414	183	193	375	216
Emmonak	666	196	959	485	594	356	696	525	191	342	514	547	518	454
Kotlik	3,353	1,931	2,167	689	1,610	534	954	1,046	787	486	542	403	1,386	763
District 1 Subtotal	5,426	2,343	3,272	2,251	2,445	1,823	2,171	1,730	1,067	1,274	1,295	1,260	2,427	1,507
Mountain Village	1,971	447	968	921	276	1,089	954	665	376	423	361	745	740	556
Pitkas Point	641	349	364	554	691	427	305	302	139	112	47	130	477	181
St. Marys	2,130	102	614	154	292	329	290	536	117	610	209	276	298	352
Pilot Station	300	477	811	241	1,258	323	413	249	1,708	222	230	371	622	564
Marshall	1,545	320	1,124	272	958	256	335	1,041	11	73	386	64	586	369
District 2 Subtotal	6,587	1,695	3,881	2,142	3,475	2,424	2,297	2,793	2,351	1,440	1,233	1,586	2,723	2,023
Russian Mission	1,148	152	55	891	255	10	233	542	24	0	115	178	273	183
Holy Cross	105	88	171	0	0	20	100	62	70	0	0	498	56	46
Shageluk	296	39	137	0	189	736	67	6	0	0	0	35	220	15
District 3 Subtotal	1,549	279	363	891	444	766	400	610	94	0	115	711	549	244
Lower Yukon River Total	13,562	4,317	7,516	5,284	6,364	5,013	4,868	5,133	3,512	2,714	2,643	3,557	5,699	3,774
Anvik	202	115	95	10	44	24	20	282	0	13	0	12	58	63
Grayling	859	164	36	97	236	1,055	133	201	372	144	30	559	318	176
Kaltag	2,105	334	245	426	298	60	71	333	110	533	212	463	273	252
Nulato	435	37	27	25	149	444	34	170	60	258	78	928	136	120
Koyukuk	1,877	70	305	33	476	345	421	295	138	80	249	1,155	246	237
Galena	1,398	124	803	275	780	1,002	322	123	71	142	169	1,507	597	165
Ruby/Kokrines	1,299	308	1,957	607	376	474	1,459	620	173	871	69	648	744	638
District 4 Yukon River Subtotal (Excluding the Koyukuk River)	8,175	1,152	3,468	1,473	2,359	3,404	2,460	2,024	924	2,041	807	5,272	2,371	1,651
Huslia	233	9	47	307	18	50	128	15	132	83	60	375	86	84
Hughes	21	3	0 ^a	153	51	250	5	10	12	117	100	20	91	49
Allakaket	0	3	0 ^a	0	39	50	0	0	0	25	56	99	18	16
Alatna	0	0	0 ^a	0	0	0	0	0	0	0	0	7	0	0
Bettles	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Koyukuk River Subtotal	254	15	47	461	108	350	133	25	144	225	216	501	196	149
District 4 Subtotal	8,429	1,167	3,515	1,934	2,467	3,754	2,593	2,049	1,068	2,266	1,023	5,773	2,567	1,800

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Community	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	1993-1997 Average	1998-2002 Average
Tanana	11,406	5,576	2,587	2,154	6,110	3,045	2,572	3,989	4,826	6,675	2,032	3,480	3,894	4,019
Rampart	75	38	99	0	5	34	20	126	0	0	0	0	35	29
Fairbanks ^b	34	0	25	18	42	26	11	0	2	11	0	120	22	5
Stevens Village	20	0	0	1	2	1	63	0	0	2	0	0	1	13
Beaver	398	135	10	20	7	0	0	0	0	0	17	0	34	3
Fort Yukon ^c	341	5	963	4	157	251 ^j	39	124	129	972	14	0	276	256
Circle	54	10	30	0	0	210	0	0	0	0	0	244	50	0
Central	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eagle	3	85	0	1	1	2	132	0	0	0	1	0	18	27
Other ^d	0	0	0	7	0	0	2	2	30	0	0	25	1	7
District 5 Yukon River Subtotal (Excluding Chandalar/Black Rivers)	12,331	5,849	3,714	2,205	6,324	3,569	2,839	4,241	4,987	7,660	2,064	3,869	4,332	4,358
Venetie	45	135	4	0	264	7	0	0	0	10	12	11	82	4
Chalkyitsik	0	0	456	0	0	7	0	0	0	4	0	7	93	1
Chandalar/Black River Subtotal	45	135	460	0	264	14	0	0	0	14	12	18	175	5
District 5 Subtotal	12,376	5,984	4,174	2,205	6,588	3,583	2,839	4,241	4,987	7,674	2,076	3,887	4,507	4,363
Manley	4,725	1,535	10,410	7,395	2,462	3,236	2,362	3,244	2,180	2,637	1,617	886	5,008	2,408
Minto	614	300	2,616	338	1,223	364	31	0	3	0	250	423	968	57
Nenana	8,895	1,314	9,387	7,142	7,883	5,147	3,519	4,023	1,767	4,443	3,574	5,431	6,175	3,465
Fairbanks ^e	2,281	0	2,103	3,076	2,314	1,230	786	868	0	102	1,024	1,049	1,745	556
Other ^f	1,039	1,155	1,973	851	1,011	1,618	774	1,259	1,200	1,818	3,034	2,574	1,322	1,617
District 6 Tanana River Subtotal	17,554	4,304	26,489	18,802	14,893	11,595	7,472	9,394	5,150	9,000	9,499	10,363	15,217	8,103
Upper Yukon Area Total	38,359	11,455	34,178	22,941	23,948	18,932	12,904	15,684	11,205	18,940	12,598	20,023	22,291	14,266
Alaska, Yukon River Total ^g	51,921	15,772	41,694	28,225	30,312	23,945	17,772	20,817	14,717	21,654	15,241	23,580	27,990	18,040
Alaska, Yukon Area Total	51,980	15,812	41,775	28,377	30,404	23,945	18,121	20,885	14,939	22,156	15,489	23,872	28,063	18,318

^a Due to floods in 1994, Hughes, Allakaket, and Alatna were not surveyed and the estimated harvest of coho salmon was zero.

^b Harvests by Fairbanks subsistence permit holders who fished in District 5 near the Yukon River bridge crossing.

^c Includes Birch Creek harvest of three coho salmon in 1997.

^d Other permit holders who fished in District 5 but did not reside in the communities listed.

^e Harvests by Fairbanks subsistence permit holders who fished in the Tanana River.

^f Other permits holders who fished in District 6 but did not reside in the communities listed.

^g Does not include the Coastal District.

Subdistrict 6-C Personal Use Salmon Fishery

Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1987	132 ^a	-	60 ^b			3,316	2,465
1988	208	162	120	317	1,182	2,074	1,125
1989	175	160	112	397	991	1,770	731
1990	152	144	102	442	918	1,353	1,120
1991 ^c	-	-	-	-	-	-	-
1992 ^c	-	-	-	-	-	-	-
1993	133	131	79	426	674	163	0
1994 ^c	-	-	-	-	-	-	-
1995	139	138	91	399	780	863	417
1996	129	125	73	215	905	356	198
1997	112	109	61	313	391	284	350
1998	103	101	52	357	84	2	9
1999 ^d	103	103	67	331	382	261	147
2000	70	69	16	75	30	1	0
2001	54	51	24	122	146	10	34
2002	57	55	29	126	175	3	20
2003	67	67	32	204	148	394	549
Five Year Average 1998-2002	77	76	38	202	163	55	42
Ten Year Average 1993-2002	100	98	55	263	396	216	131

Subdistrict 6-A Personal Use Salmon Fishery

Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1987	no permits issued						
1988	1	1	0	0	0	0	0
1989	1	1	1	0	4	0	0
1990	1	1	0	0	0	0	0
1991	no permits issued						
1992	no permits issued						
1993	no permits issued						
1994	no permits issued						
1995	no permits issued						
1996	no permits issued						
1997 ^e	no permits issued						
1988-1990 Average	1	1	0	0	1	0	0

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Subdistrict 6-B Personal Use Salmon Fishery

Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1987	no permits issued						
1988	1	1	1	306	60	40	22
1989	1	1	1	56	220	0	0
1990	4	4	3	9	12	40	35
1991	no permits issued						
1992	no permits issued						
1993	no permits issued						
1994	no permits issued						
1995	no permits issued						
1996	no permits issued						
1997 ^e	no permits issued						
<hr/>							
1988-1990							
Average	2	2	2	124	97	27	19

Upper Tanana River Personal Use Salmon Fishery

Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum	Fall Chum	Coho
1987	no permits issued						
1988	no permits issued						
1989	no permits issued						
1990	no permits issued						
1991 ^f	no permits issued						

^a Includes 60 former subsistence fishermen who were reissued personal use permits to fish for fall chum salmon^b Some fishing families used both subsistence and personal use permits.^c From July 1, 1990 through 1992, and in 1994, the regulations did not provide for a personal use fishery in this area.^d Does not include four whitefish and sucker fishery permitholders, two of which fished, that reported a total harvest of one fall chum and six coho salmon in 1999.^e After 1997 the regulations did not provide for a personal use fishery in these areas.^f After July 1, 1991 the regulations did not provide for a personal use salmon fishery in this area.

Appendix B.6. Subsistence salmon harvests taken under authority of a permit in portions of District 5, Yukon Area, 1974-2003. ^a

Yukon River "Bridge" Area Subsistence Salmon Fishery ^b							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum ^c	Fall Chum ^c	
1974	29	-	-	591	-	1,857	1,271
1975	19	-	-	727	-	778	70
1976	28	-	18	531	-	974	-
1977	38	-	-	467	-	2,567	-
1978	57	-	-	1,333	-	9,735	-
1979	55	-	41	2,194	-	12,374	-
1980	70	-	67	1,350	-	6,488	36
1981	57	-	24	1,095	-	12,034	-
1982	64	-	44	1,935	-	11,328	20
1983	68	-	46	2,672	-	15,059	-
1984	67	-	54	4,676	-	27,869	399
1985	55	-	42	2,618	-	21,832	33
1986	76	-	58	3,827	-	18,690	759
1987	16	-	14	1,818	2,091	7,631	6
1988	24	21	18	1,747	2,097	3,183	606
1989	26	20	13	2,483	574	1,157	309
1990	26	25	16	2,033	3,493	1,109	455
1991	52	46	34	2,529	1,295	3,953	20
1992	45	42	33	2,241	975	2,491	34
1993	49	47	36	3,767	492	2,915	16
1994	50	49	36	3,073	384	2,911	25
1995	59	59	39	3,253	954	2,244	59
1996	47	45	31	1,157	3,475	2,727	42
1997	44	42	28	1,588	683	491	26
1998	48	47	31	1,685	103	156	15
1999	66	64	47	1,653	356	701	2
2000	56	52	33	1,607	324	8	32
2001	65	60	36	1,819	176	0	13
2002	60	58	44	2,275	320	100	0
2003	86	80	62	2,670	89	104	145
Five Year Average							
1998-2002	59	56	38	1,808	256	193	12
Ten Year Average							
1993-2002	54	52	36	2,188	727	1,225	23

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Upper Yukon River "Circle-Eagle" Area Subsistence Salmon Fishery^d

Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum ^c	Fall Chum ^c	Coho
1979	75	-	6	4,063	-	30,475	114
1980	48	-	39	3,649	-	18,477	6
1981	71	-	51	4,510	-	38,333	-
1982	60	-	61	3,833	-	15,432	-
1983	53	-	52	2,831	-	23,708	-
1984	58	-	54	2,543	-	21,675	17
1985	59	-	36	2,419	-	19,059	2
1986	40	-	52	4,148	-	20,701	43
1987	51	51	58 ^e	3,602	2,495	27,369	0
1988	58	57	50	2,783	2,134	9,078	101
1989	59	56	42	1,186	68	7,515	1
1990	81	75	54	3,746	1,629	14,992	206
1991	70	69	48	3,219	658	14,898	5
1992	85	79	54	2,984	409	12,009	57
1993	79	79	49	1,910	118	2,419	95
1994	79	76	51	3,093	145	12,844	30
1995	87	87	53	3,628	129	19,047	1
1996	86	84	51	3,458	528	20,861	1
1997	98	93	60	3,148	393	18,616	212
1998	101	95	54	3,562	55	630	132
1999	119	116	71	3,404	364	14,079	0
2000	121	118	47	1,806	233	33	0
2001	98	90	32	1,688	651	5,322	0
2002	94	79	39	3,639	29	413	1
2003	95	85	58	3,406	189	3,374	0
Five Year Average							
1998-2002	107	100	49	2,820	266	4,095	27
Ten Year Average							
1993-2002	96	92	51	2,934	265	9,426	47

^a Prior to 1988 the reported harvest was expanded for permits not returned. Beginning in 1988, reported harvest was not expanded.

^b That portion of the Yukon River drainage from Hess Creek to Dall River.

^c Summer chum and fall chum salmon undifferentiated from 1974-1986.

^d That portion of the Yukon River drainage from Twenty-Two Mile Slough, above the village of Fort Yukon, to the United States/Canadian border.

^e Some fishermen reporting harvests did not have permits.

Appendix B.7. Subsistence salmon harvests taken under authority of a permit, Tanana River drainage, 1973-2003.^a

Subdistrict 6-A Subsistence Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1988 ^b	28	24	18	845	1,389	9,165	3,455
1989 ^{b,c}	29	28	24 ^d	651	1,918	25,266	5,292
1990 ^c	42	36	26	1,369	2,250	27,957	8,408
1991	45	41	31	420	1,716	17,472	8,486
1992	38	35	26	508	450	5,999	5,028
1993 ^c	42	41	22	331	784	2,617	1,317
1994 ^f	37	37	30	576	3,793	18,076	12,449
1995	41	38	29	456	4,898	23,522	11,344
1996	31	29	23	209	1,338	18,931	5,959
1997	33	32	21	887	542	10,621	3,703
1998	31	31	19	512	519	4,726	1,526
1999	24	24	14	137	525	5,712	3,464
2000	24	24	12	80	240	0	2,441
2001	22	20	10	398	327	1,330	2,637
2002	18	17	15	373	99	1,076	1,883
2003	23	21	13	276	65	2,445	2,514
<hr/>							
Five Year Average 1998-2002	24	23	14	300	342	2,569	2,390
<hr/>							
Ten Year Average 1993-2002	30	29	20	396	1,307	8,661	4,672
<hr/>							
Subdistrict 6-B Subsistence Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest ^g			Coho
				Chinook	Summer Chum	Fall Chum	
1988	75	66	52	3,721	3,167	18,902	18,906
1989 ^h	60	51	37 ^d	455	363	18,506	8,453
1990 ^h	70	58	38	1,234	1,966	16,332	9,155
1991 ^h	87	78	51	1,796	2,373	21,629	11,971
1992 ^h	98	89	57	1,587	7,820	18,782	11,409
1993	99	89	38	1,341	5,976	7,166	2,987
1994	102	94	49	1,337	2,035	13,726	12,480
1995	98	98	59	1,322	6,712	25,364	7,458
1996	105	96	59	968	6,138	17,439	8,934
1997	103	95	55	1,825	3,282	8,729	7,892
1998	94	84	46	1,407	5,485	9,573	5,937
1999	83	79	47	1,487	2,129	9,757	5,930
2000	81	79	33	903	869	210	2,709
2001	87	77	42	1,511	74	1,983	5,646
2002	62	60	25	525	711	2,193	8,032
2003	77	72	40	1,839	2,849	10,537	7,849
<hr/>							
Five Year Average 1998-2002	81	76	39	1,167	1,854	4,743	5,651
<hr/>							
Ten Year Average 1993-2002	91	85	45	1,263	3,341	9,614	6,801

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Upper Tanana River Drainage Subsistence Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1988	0	0	0	0	0	0	0
1989	2	2	2	5	0	39	0
1990	1	1	0	0	0	0	0
1991	8	7	6	0	0	288	14
1992	11	11	4	0	0	36	1
1993	10	10	8	0	0	5	0
1994	7	7	3	0	0	202	15
1995	50	46	12	0	0	88	0
1996	42	39	15	0	10	97	0
1997	61	58	26	0	0	200	0
1998	46	46	17	0	0	71	9
1999	29	29	13	0	0	2	0
2000	41	36	16	0	2	100	0
2001	57	47	21	0	0	2	1
2002	32	30	16	0	0	25	0
2003	38	32	17	30	0	4	0
Five Year Average 1998-2002	41	38	17	0	0	40	2
Ten Year Average 1993-2002	38	35	15	0	1	79	3

Subdistrict 6-C Subsistence Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho ^j
				Chinook	Summer Chum	Fall Chum	
1973	22	-	4	26	771	886	-
1974	70	-	-	38	1,373	1,580	-
1975	36	-	-	32	751	864	-
1976	110	-	-	31	1,314	1,512	-
1977	89	-	33	81	118	607	-
1978	160	-	126	126	2,729	1,188	-
1979	246	-	199	264	2,384	4,459	-
1980	315	-	254	282	3,729	4,059	-
1981	346	-	228	440	3,239	5,770	-
1982	330	-	209	451	2,708	4,521	-
1983	259	-	147	475	2,276	3,830	-
1984	308	-	212	321	3,177	5,134	-
1985	291	-	155	326	2,646	3,937	-
1986	323	-	211	637	4,031	4,437	-
1987 ^k	217	-	123	531	2,739	0	0
1988	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0
1990 ^m	19	18	6	15	69	279	50
1991	149	142	98	299	980	1,080	1,089
1992	149	146	90	343	1,234	896	1,116
1993 ⁿ	0	0	0	0	0	0	0
1994 ^{p, r}	145	142	107	457	1,198	1,600	1,545
All Years Average	163	64	116	235	1,703	2,120	475

^a Prior to 1988, salmon harvests were expanded for permits not returned. Beginning in 1988, the reported harvests were not expanded. Dashes in the table indicate the information is not available.

^b Many Subdistrict 6-A fishermen did not obtain a permit in 1988 and 1989.

^c Includes salmon given away as part of the department's test fishing project in Manley.

^d Includes harvests reported by fishermen who did not have permits.

^f Beginning in 1994, a separate Kantishna River drainage permit was required. The Subdistrict 6-A harvest totals include those from the Kantishna River drainage.

^g Includes small numbers of salmon harvested and reported on the Tolovana River drainage (Subdistrict 6-B) subsistence pike permit, established in 1993.

^h Includes salmon given away as part of the department's test fish project in Nenana.

ⁱ Prior to 1988 fall chum and coho salmon were not reported as separate species.

^k Personal use fishery established for nonrural residents beginning in July of 1987.

^m Some fishermen had both personal use and subsistence permits. The McDowell Decision became effective July 1990. (midway through the season), and stated that all Alaskan residents were eligible subsistence participants.

ⁿ Personal use fishery was established for those fishing for salmon in the Fairbanks Nonsubsistence Area, which includes Subdistrict 6-C.

^p No personal use permits were issued in 1994 for this area.

^r After 1994 subsistence regulations were repealed within the Fairbanks Nonsubsistence Area, which includes Subdistrict 6-C.

Appendix B.8. Estimated number of salmon distributed from test fish projects, Yukon Area, 1992 to 2003. ^a

Chinook Salmon															
Year	Set Gillnet Test Fish	Drift Gillnet Test Fish Projects								Test Fish Wheel Projects ^b					Total
	Lower Yukon	Lower	Mountain	Pilot	Russian					Galena	Manley	Kantishna	Nenana	Tanana	Fort Yukon
		Yukon	Village	Station	Marshall	Marshall ^c	Mission ^c	Kaltag	Rampart						
1992	1,715	-	-	-	-	-	-	-	-	-	0	-	113	-	- 1,828
1993	1,584	-	-	471	-	-	-	-	-	-	0	-	0	0	- 2,055
1994	1,985	-	-	334	-	-	-	-	-	-	0	-	0	0	- 2,319
1995	1,715	-	1	166	-	-	-	-	-	2	1	-	0	0	0 1,885
1996	1,355	-	0	0	-	-	-	-	-	-	0	-	0	0	0 1,355
1997	1,825	-	2	330	-	-	-	-	-	-	0	-	0	0	- 2,157
1998	1,035	-	8	435	-	-	-	-	-	-	0	-	0	0	- 1,478
1999	1,656	-	1	359	773	-	-	1	-	-	0	-	0	0	- 2,790
2000	1,344	-	0	450	1,024	11	23	0	-	-	-	0	0	0	- 2,852
2001	1,379	535	-	561	-	27	11	-	-	-	-	0	0	-	- 2,513
2002	1,268	253	-	545	-	8	18	-	-	-	-	0	0	0	- 2,092
2003	^d	374	-	846	-	-	33	-	0	-	-	0	0	0	- 1,253
Five Year Average															
1998 to 2002	1,336	394	3	470	899	15	21	1	-	-	0	0	0	0	- 2,345

Summer Chum Salmon															
Year	Set Gillnet Test Fish	Drift Gillnet Test Fish Projects								Test Fish Wheel Projects ^b					Total
	Lower Yukon	Lower	Mountain	Pilot	Russian					Galena	Manley	Kantishna	Nenana	Tanana	Fort Yukon
		Yukon	Village	Station	Marshall	Marshall ^c	Mission ^c	Kaltag	Rampart						
1992	3,989	-	-	-	-	-	-	-	-	-	0	-	112	-	- 4,101
1993	4,111	-	-	2,098	-	-	-	-	-	-	33	-	0	0	- 6,242
1994	7,060	-	-	2,998	-	-	-	-	-	-	0	-	0	0	- 10,058
1995	6,382	-	0	1,875	-	-	-	-	-	57	50	-	0	0	0 8,364
1996	7,052	-	0	276	-	-	-	-	-	-	0	-	0	0	0 7,328
1997	4,539	-	0	2,420	-	-	-	-	-	-	0	-	0	0	- 6,959
1998	2,290	-	0	2,209	-	-	-	-	-	-	0	-	0	147	- 4,646
1999	2,717	-	0	1,636	181	-	-	0	-	-	0	-	0	0	- 4,534
2000	2,499	-	0	2,141	335	0	0	0	-	-	-	5	0	0	- 4,980
2001	211	1,787	-	1,696	-	1	2	-	-	-	-	0	0	-	- 3,697
2002	199	2,209	-	2,174	-	10	-	-	-	-	-	0	0	0	- 4,592
2003	^a	1,801	-	2,060	-	-	5	-	0	-	-	0	0	0	- 3,866
Five Year Average															
1998 to 2002	1,583	1,998	0	1,971	258	4	1	0	-	-	0	3	0	37	- 4,490

- Continued -

Fall Chum Salmon															
Year	Set Gillnet Test Fish	Drift Gillnet Test Fish Projects								Test Fish Wheel Projects ^b					
	Lower Yukon	Lower Yukon	Mountain Village	Pilot Station	Marshall	Marshall ^c	Russian Mission ^c	Kaltag	Rampart	Galena	Manley	Kantishna	Nenana	Tanana	Fort Yukon
1992	2,462	-	-	-	-	-	-	-	-	-	0	-	110	-	- 2,572
1993	3,692	-	-	652	-	-	-	-	-	-	65	-	0	0	- 4,409
1994	2,566	-	-	1,349	-	-	-	-	-	-	0	-	7	1,895	- 5,817
1995	2,408	-	523	541	-	-	-	-	-	199	194	-	0	1,876	1,570 7,311
1996	1,421	-	319	150	-	-	-	-	-	-	0	-	0	0	1,081 2,971
1997	1,466	-	962	997	-	-	-	-	-	-	0	-	0	0	- 3,425
1998	2,000	-	664	1,110	-	-	-	-	-	-	0	-	0	0	- 3,774
1999	4,061	-	1,008	968	0	-	-	483	-	-	0	-	0	0	- 6,520
2000	2,921	-	269	834	0	0	0	190	-	-	-	0	0	0	- 4,214
2001	-	1,694	339	1,492	-	-	-	494	-	-	-	0	0	0	- 4,019
2002	-	1,050	175	680	-	-	-	314	-	-	-	0	0	0	- 2,219
2003	-	1,247	328	823	-	-	-	457	873	-	-	0	0	0	- 3,728
Five Year Average 1998 to 2002															
	2,994	1,372	491	1,017	0	0	0	388	-	-	0	0	0	0	- 4,149

Coho Salmon															
Year	Set Gillnet Test Fish	Drift Gillnet Test Fish Projects								Test Fish Wheel Projects ^b					
	Lower Yukon	Lower Yukon	Mountain Village	Pilot Station	Marshall	Marshall ^c	Russian Mission ^c	Kaltag	Rampart	Galena	Manley	Kantishna	Nenana	Tanana	Fort Yukon
1992	2,557	-	-	-	-	-	-	-	-	-	0	-	0	-	- 2,557
1993	1,210	-	-	222	-	-	-	-	-	-	0	-	0	0	- 1,432
1994	2,033	-	-	786	-	-	-	-	-	-	0	-	0	266	- 3,085
1995	579	-	559	205	-	-	-	-	-	0	0	-	0	164	0 1,507
1996	755	-	228	25	-	-	-	-	-	-	0	-	0	0	0 1,008
1997	593	-	309	283	-	-	-	-	-	-	0	-	0	0	- 1,185
1998	792	-	567	364	-	-	-	-	-	-	0	-	0	0	- 1,723
1999	649	-	2	180	0	-	-	70	-	-	0	-	0	0	- 901
2000	949	-	313	1,705	0	0	0	110	-	-	-	322	0	0	- 3,399
2001	-	492	302	180	-	-	-	251	-	-	-	0	0	0	- 1,225
2002	-	374	155	225	-	-	-	158	-	-	-	0	0	0	- 912
2003	-	635	362	371	-	-	-	23	0	-	-	0	0	0	- 1,391
Five Year Average 1998 to 2002															
	797	433	268	531	0	0	0	122	-	-	0	161	0	0	- 1,632

^a Dashes indicate test fish project was not in operation.^b Does not include salmon that were accounted for by using the survey or permit methods.^c Chinook salmon radio telemetry project.^d Salmon caught in the lower Yukon set gillnet test fishery are included with Lower Yukon drift gillnet totals.

Appendix B.9. Estimated pink salmon subsistence harvest by residents of surveyed villages, with village and district totals, Yukon Area, 1994 to 2003.

Community	1994 ^a	1995	1996	1997	1998	1999	2000	2001	2002	2003	Estimated Total		
											Even Years Average	Odd Years Average	1994 to 2002 Average
Hooper Bay	734	326	3,212	265	1,941	99	902	32	5,475	473	2,453	239	1,443
Scammon Bay	1,319	559	305	0	1,791	527	96	362	417	997	786	489	597
Coastal District	2,053	885	3,517	265	3,732	626	998	394	5,892	1,470	3,238	728	2,040
Nunam Iqua ^b	1,388	1	262	1	299	0	0	0	10	5	392	1	218
Alakanuk	54	124	35	33	239	0	38	0	130	0	99	31	73
Emmonak	1,451	5	46	35	145	17	0	9	39	4	336	14	194
Kotlik	1,340	2	100	0	907	15	263	0	849	198	692	43	386
District 1	4,233	132	443	69	1,590	32	301	9	1,028	207	1,519	90	871
Mountain Village	806	35	611	10	753	0	61	0	745	117	595	32	336
Pitkas Point	163	4	280	101	330	12	114	0	35	0	184	23	115
St. Mary's	850	0	42	4	467	1	54	0	7	0	284	1	158
Pilot Station	32	0	0	0	0	8	6	0	22	0	12	2	8
Marshall	880	6	0	0	0	0	0	0	473	0	271	1	151
District 2	2,731	45	933	115	1,550	21	235	0	1,282	117	1,346	60	768
Russian Mission	200	0	0	0	211	0	8	0	0	0	84	0	47
Holy Cross	89	0	140	0	150	0	20	0	0	0	80	0	44
Shageluk	0	0	40	0	1,256	0	0	0	0	130	259	26	144
District 3	289	0	180	0	1,617	0	28	0	0	130	423	26	235
Anvik	475	0	0	0	50	0	30	0	0	240	111	48	62
Grayling	451	0	4	0	649	1	0	0	30	3	227	1	126
Kaltag	0	0	0	11	1	1	0	0	0	0	0	2	1
Nulato	4	0	0	0	0	0	0	0	50	0	11	0	6
Koyukuk	4	0	0	23	0	0	0	0	4	0	2	5	3
Galena	61	0	52	0	0	0	0	0	50	0	33	0	18
Ruby	0	0	3	0	0	0	1	0	87	0	18	0	10
Huslia	0	0	0	0	0	0	0	0	0	0	0	0	0
Hughes	0	0	0	0	0	0	0	0	0	0	0	0	0
Allakaket	0	0	0	0	0	0	0	0	0	0	0	0	0
Alatna	0	0	0	0	0	0	0	0	0	0	0	0	0
Bettles	0	0	0	0	0	0	0	0	0	0	0	0	0
District 4	995	0	59	34	700	2	31	0	221	243	401	56	227
Tanana	0	0	0	0	0	0	0	0	0	0	0	0	0
Rampart	0	0	0	0	0	0	0	0	0	0	0	0	0
Stevens Village	0	0	0	0	0	0	0	0	0	0	0	0	0
Birch Creek	0	0	0	0	0	0	0	0	0	0	0	0	0
Beaver	0	0	0	0	0	0	0	0	0	0	0	0	0
Fort Yukon	0	0	0	0	0	0	0	0	0	0	0	0	0
Venetie	0	0	0	0	0	0	0	0	0	0	0	0	0
Chalkyitsik	0	0	0	0	0	0	0	0	0	0	0	0	0
District 5	0	0	0	0	0	0	0	0	0	0	0	0	0
Survey Totals	10,301	1,062	5,132	483	9,189	681	1,593	403	8,423	2,167	6,928	959	4,141
CI (95%) ^c	2,496	635	2,204	290	2,511	621	559	416	4,091	964	-	-	-

^a Due to floods in 1994, Hughes, Allakaket, and Alatna were not surveyed and the estimated harvest of pink salmon was zero.^b Formerly known as Sheldon or Sheldon Point.^c Includes annual 95 percent confidence interval, CI (95%).

Appendix B.10. Households with dogs, number of dogs, and salmon fed to dogs, as estimated in surveyed villages or reported in permit areas, Yukon Area, 1990-2003. ^a

Districts Survey or Permit	Number of Households with Dogs	Number of Dogs	Summer Chum Salmon Fed to Dogs	Fall Chum Salmon Fed to Dogs	Coho Salmon Fed to Dogs	Total Salmon Fed to Dogs
1990						
Coastal District Survey	-	-	-	-	-	-
District 1 Survey	-	455	2,859	372	0	3,231
District 2 Survey	-	775	3,278	415	3,665	7,358
District 3 Survey	-	272	8,248	120	166	8,534
District 4 Survey	-	1,385	91,256	6,911	2,511	100,678
District 5 Survey	-	1,286	5,697	72,424	9,118	87,239
District 5 Permit ^b	-	-	-	-	-	-
District 6 Permit	-	-	-	-	-	-
Totals	0	4,173	111,338	80,242	15,460	207,040
1991						
Coastal District Survey	-	-	-	-	-	-
District 1 Survey	-	349	30	0	16	46
District 2 Survey	-	543	723	652	874	2,249
District 3 Survey	-	145	1,747	150	0	1,897
District 4 Survey	-	1,660	169,866	903	591	171,360
District 5 Survey	-	1,520	28,518	54,657	2,754	85,929
District 5 Permit ^b	49	400	-	-	-	11,522
District 6 Permit	220	1,980	-	-	-	19,479
Totals	269	6,597	200,884	56,362	4,235	292,482
1992						
Coastal District Survey	133	513	659	0	0	659
District 1 Survey	262	617	512	1,000	153	1,665
District 2 Survey	285	971	694	247	2,237	3,178
District 3 Survey	113	507	4,893	74	37	5,004
District 4 Survey	436	2,065	139,513	6,950	3,323	149,786
District 5 Survey	323	1,577	12,897	38,529	14,529	65,955
District 5 Permit ^b	52	492	-	-	-	7,026
District 6 Permit	255	2,270	-	-	-	18,115
Totals	1,859	9,012	159,168	46,800	20,279	251,388
1993						
Coastal District Survey	150	391	0	0	0	0
District 1 Survey	280	690	654	70	22	746
District 2 Survey	232	880	794	260	670	1,724
District 3 Survey	118	447	2,671	734	162	3,567
District 4 Survey	435	1,645	44,793	3,905	579	49,277
District 5 Survey	348	1,840	5,490	38,888	5,147	49,525
District 5 Permit ^b	54	1,031	-	-	-	1,133
District 6 Permit	143	1,857	-	-	-	1,547
Totals	1,760	8,781	54,402	43,857	6,580	107,519
1994						
Coastal District Survey	161	367	1,287	0	0	1,287
District 1 Survey	288	819	267	144	384	795
District 2 Survey	286	1,074	1,066	653	2,470	4,189
District 3 Survey	123	413	5,279	0	162	5,441
District 4 Survey ^c	427	1,649	92,127	4,720	2,916	99,763
District 5 Survey	355	1,426	10,903	51,674	4,422	66,999
District 5 Permit ^b	103	534	-	-	-	9,824
District 6 Permit	212	2,269	-	-	-	34,111
Totals	1,955	8,551	110,929	57,191	10,354	222,409
1995						
Coastal District Survey	158	596	2,919	214	0	3,133
District 1 Survey	223	391	531	43	7	581
District 2 Survey	213	677	1,587	436	979	3,002
District 3 Survey	111	347	8,450	265	100	8,815
District 4 Survey	423	1,830	183,386	9,092	1,151	193,629
District 5 Survey	356	1,442	6,222	50,680	2,107	59,009
District 5 Permit ^b	54	495	-	-	-	17,980
District 6 Permit	103	1,723	-	-	-	50,731
Totals	1,641	7,501	203,095	60,730	4,344	336,880

- Continued -

Districts Survey or Permit	Number of Households with Dogs	Number of Dogs	Summer Chum Salmon Fed to Dogs	Fall Chum Salmon Fed to Dogs	Coho Salmon Fed to Dogs	Total Salmon Fed to Dogs ^a
1996						
Coastal District Survey	159	406	0	0	0	0
District 1 Survey	298	682	1,847	250	38	2,135
District 2 Survey	251	1,044	1,460	1,724	1,423	4,607
District 3 Survey	134	513	3,558	0	0	3,558
District 4 Survey	468	1,607	130,575	5,771	1,324	137,670
District 5 Survey	325	1,289	10,155	48,836	5,966	64,957
District 5 Permit ^b	53	293	-	-	-	14,345
District 6 Permit	176	1,907	-	-	-	43,590
Totals	1,864	7,741	147,595	56,581	8,751	270,862
1997						
Coastal District Survey	174	494	837	0	0	837
District 1 Survey	255	683	103	0	0	103
District 2 Survey	301	1,075	779	498	142	1,419
District 3 Survey	111	492	11,418	400	746	12,564
District 4 Survey	430	1,209	63,850	4,481	3,141	71,472
District 5 Survey	254	1,146	2,943	33,188	2,961	39,092
District 5 Permit ^b	95	569	-	-	-	19,584
District 6 Permit	156	1,898	-	-	-	12,813
Totals	1,776	7,566	79,930	38,567	6,990	157,884
1998						
Coastal District Survey	185	503	0	0	0	0
District 1 Survey	259	555	1,711	270	0	1,981
District 2 Survey	293	966	682	110	137	929
District 3 Survey	106	394	4,288	32	202	4,522
District 4 Survey	560	1,731	14,468	3,394	1,935	19,797
District 5 Survey	356	1,342	2,029	29,448	2,680	34,157
District 5 Permit ^b	113	598	-	-	-	1,262
District 6 Permit	136	1,610	-	-	-	22,311
Totals	2,008	7,699	23,178	33,254	4,954	84,959
1999						
Coastal District Survey	163	276	135	0	0	135
District 1 Survey	252	451	254	20	25	299
District 2 Survey	312	982	778	52	1,277	2,107
District 3 Survey	95	374	4,153	50	240	4,443
District 4 Survey	481	1,502	15,546	3,399	1,513	20,458
District 5 Survey	273	1,233	1,436	36,006	3,844	41,286
District 5 Permit ^b	141	739	-	-	-	11,013
District 6 Permit	107	1,321	-	-	-	13,256
Totals	1,824	6,878	22,302	39,527	6,899	92,997
2000						
Coastal District Survey	215	451	0	0	0	0
District 1 Survey	247	552	1,240	741	0	1,981
District 2 Survey	307	941	467	30	30	527
District 3 Survey	111	374	419	150	70	639
District 4 Survey	441	1,318	4,237	846	329	5,412
District 5 Survey	236	811	1,263	5,972	1,791	9,026
District 5 Permit ^{b d}	67	568	-	-	-	317
District 6 Permit ^d	70	1,327	-	-	-	3,082
Totals	1,694	6,342	7,626	7,739	2,220	20,984
2001						
Coastal District Survey	234	495	0	0	0	0
District 1 Survey	318	609	223	100	0	323
District 2 Survey	331	926	255	210	80	545
District 3 Survey	114	610	873	111	25	1,009
District 4 Survey	553	2,074	4,571	2,014	1,263	7,848
District 5 Survey	293	1,026	1,649	10,629	5,976	18,254
District 5 Permit ^{b d}	121	583	-	-	-	8,065
District 6 Permit ^d	130	1,266	-	-	-	7,506
Totals	2,094	7,589	7,571	13,064	7,344	43,550

- Continued -

Districts Survey or Permit	Number of Households with Dogs	Number of Dogs	Summer Chum Salmon Fed to Dogs	Fall Chum Salmon Fed to Dogs	Coho Salmon Fed to Dogs	Total Salmon Fed to Dogs
2002						
Coastal District Survey	207	399	0	0	67	67
District 1 Survey	282	655	14	59	30	103
District 2 Survey	327	847	221	38	379	638
District 3 Survey	88	312	620	0	0	620
District 4 Survey	437	1,502	8,286	848	697	9,831
District 5 Survey	197	677	2,256	6,324	1,393	9,973
District 5 Permit ^{b d}	81	546	-	-	-	689
District 6 Permit ^d	111	806	-	-	-	11,722
Totals	1,730	5,744	11,397	7,269	2,566	33,643
2003						
Coastal District Survey	132	365	0	0	0	0
District 1 Survey	239	483	115	0	38	153
District 2 Survey	236	729	635	0	58	693
District 3 Survey	87	298	3,650	0	0	3,650
District 4 Survey	384	1,728	15,648	4,118	3,271	23,037
District 5 Survey	221	864	3,268	19,267	2,862	25,397
District 5 Permit ^{b d}	59	672	-	-	-	1,614
District 6 Permit ^d	161	866	-	-	-	12,717
Totals	1,519	6,005	23,316	23,385	6,229	67,261
1998-2002 Average						
Coastal District Survey	201	425	27	0	13	40
District 1 Survey	272	564	688	238	11	937
District 2 Survey	314	932	481	88	381	949
District 3 Survey	103	413	2,071	69	107	2,247
District 4 Survey	494	1,625	9,422	2,100	1,147	12,669
District 5 Survey	271	1,018	1,727	17,676	3,137	22,539
District 5 Permit ^{b d}	105	607	-	-	-	4,269
District 6 Permit ^d	111	1,266	-	-	-	11,575
Totals	1,870	6,850	14,415	20,171	4,797	55,227

^a Beginning in 1993, the estimated number of salmon includes those retained from subsistence and commercial (commercial-related) harvests. Dashes indicate information was not collected.

^b Permit totals do not include the community of Stevens Village.

^c Does not include the villages of Hughes, Allakaket and Alatna which were not surveyed due to a major flood event.

^d Does not include duplicate information from households with more than one permit.

Appendix B.11. Surveyed households which indicated that their subsistence salmon needs were not met, Yukon Area, 1992 to 2003.

Year	Total Number of Households Contacted	Total Number of Responses by Households	Total Number of Responses Indicating Needs Were not Met	Percent of Responses Indicating Needs Were not Met	Percent of Responses Indicating Poor Salmon Returns
1992	870		272	31%	7%
1993	979		514	53%	8%
1994	933		345	37%	1%
1995	1,011		207	20%	1%
1996	951		230	24%	6%
1997	915		213	23%	6%
1998	970		593	61%	47%
1999	1,024		385	38%	18%
2000 ^a	932		592	64%	77%
2001	885 ^b		496	56%	73%
2002	799 ^b		437	55%	25%
2003 ^c	657 ^b	1,357 ^d	473	35%	^e
Average 1992 to 2002	934		389	41%	24%

^a A different method from prior years was used from 2000 to 2002 to provide an indication of the quality of the salmon runs by species. The method used was a percentage weighted average of Chinook, summer chum, fall chum, and coho salmon responses from households that indicated poor salmon runs by species contributed to not meeting their needs.

^b Total number of people who answered this question, rather than total number contacted.

^c This question was altered on the 2003 survey to better reflect the percent success of households meeting their salmon needs by community and by species as summarized in Table 17. To make Table 17 data more comparable for this appendix table, all household individual responses of 50% or less for each salmon species, as to whether their subsistence salmon needs were not met, are included here.

^d Includes total number of responses by households for each salmon species. Up to four responses per household may be included here depending upon if household fished for Chinook, summer chum, fall chum, and coho salmon.

^e This question was dropped from 2003 surveys.

Appendix B.12. Estimated and reported subsistence and personal use harvest of miscellaneous non-salmon fish species, Yukon Area, 1993 to 2003.

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Five Year Average 1998 to 2002
Survey Estimates ^a												
Whitefish	70,479	84,734	58,660	63,610	77,630	70,261	50,748	45,292	86,200	78,489	68,416	66,198
Pike	11,787	28,515	17,646	18,833	29,540	22,459	16,928	9,174	16,753	18,906	22,341	16,844
Sheefish	12,039	17,117	12,186	17,793	19,538	19,159	12,550	6,581	14,384	15,960	14,280	13,727
Survey Reported												
Burbot	316	9,181	4,602	13,654	6,381	6,704	11,545	2,168	2,836	5,809	3,000	5,812
Lamprey	2	2,565	5,122	4,630	2,533	2,580	30,536	785	4,520	623	29,886	7,809
Tomcod	2,069	1,875	4,724	4,554	6,088	5,401	2,399	2,999	7,278	4,497	4,608	4,515
Grayling	122	1,559	1,285	1,664	1,600	1,578	1,476	346	1,503	1,408	2,421	1,262
Suckers	67	304	210	191	667	128	104	364	277	546	234	284
Arctic Char	2	174	265	210	131	206	131	32	251	198	376	164
Blackfish	8,810	190,736	233,890	145,752	275,469	302,623	165,252	42,110	85,938	432,967	161,703	205,778
Permit Reported												
Whitefish	3,139	3,509	3,172	5,474	5,157	4,019	3,734	3,205	2,430	2,856	5,508	3,249
Pike	1,150	1,214	1,280	2,113	1,978	793	812	687	451	791	1,266	707
Sheefish	49	361	87	127	190	137	176	85	75	66	203	108
Burbot	66	196	187	105	215	137	101	95	124	65	129	104
Grayling	-	3	10	315	154	55	439	521	51	138	1,228	241
Suckers	-	68	456	1,156	858	459	986	739	236	344	978	553
Yukon Area Totals												
Whitefish	73,618	88,243	61,832	69,084	82,787	74,280	54,482	48,497	88,630	81,345	73,924	69,447
Pike	12,937	29,729	18,926	20,946	31,518	23,252	17,740	9,861	17,204	19,697	23,607	17,551
Sheefish	12,088	17,478	12,273	17,920	19,728	19,296	12,726	6,666	14,459	16,026	14,483	13,835
Burbot	382	9,377	4,789	13,759	6,596	6,841	11,646	2,263	2,960	5,874	3,129	5,917
Lamprey	2	2,565	5,122	4,630	2,533	2,580	30,536	785	4,520	623	29,886	7,809
Tomcod	2,069	1,875	4,724	4,554	6,088	5,401	2,399	2,999	7,278	4,497	4,608	4,515
Grayling	122	1,562	1,295	1,979	1,754	1,633	1,915	867	1,554	1,546	3,649	1,503
Suckers	67	372	666	1,347	1,525	587	1,090	1,103	513	890	1,212	837
Arctic Char	2	174	265	210	131	206	131	32	251	198	376	164
Blackfish	8,810	190,736	233,890	145,752	275,469	302,623	165,252	42,110	85,938	432,967	161,703	205,778

^a Subsistence whitefish, pike, and sheefish estimates in surveyed communities is based on a stratified random sample of households as designated for the estimation of subsistence salmon harvests.

APPENDIX C

A BRIEF HISTORY OF REGULATORY CHANGES MADE TO SUBSISTENCE AND PERSONAL USE SALMON FISHERIES IN THE ALASKA PORTION OF THE YUKON AREA SINCE 1960

Appendix C. A brief history of regulatory changes made to subsistence and personal use salmon fisheries in the Alaska portion of the Yukon Area since 1960.

1960

- Alaska Department of Fish and Game is given responsibility to manage all Alaskan subsistence and commercial fisheries.
- Commercial fishing on quota system, and only for Chinook salmon. All other species only for subsistence.
- Fishing is open six days per week until the quota is reached.
- Once commercial fishing season ends, subsistence fishing is open 7 days per week.

1961

- Lower Yukon Area Chinook salmon commercial fishery is open 4 days per week. Subsistence fishing is reduced to 4 days per week, concurrent with commercial.
- Directed fall chum salmon fishery begins, with commercial 4 days per week. Subsistence continues 7 days per week.
- For first time, commercial fisheries managed on flexible basis of openings and closures rather than quota system.

1962

- Four fishing districts established on Yukon River.

1968

- Summer season subsistence/commercial fishing in the Lower Yukon Area is reduced to 3.5 days per week during the commercial Chinook and summer chum salmon season.

1974

- Six commercial fishing districts established within Alaskan portion of the Yukon River drainage.
- Subsistence fishing restrictions are implemented along the southern portion of the Dalton Highway.
- Upper Yukon Area (Districts 4 – 6) begins concurrent subsistence and commercial fishing 5 days per week.
- Subsistence fishing schedules are linked to commercial fishing schedules in Districts 1-6. Subsistence fishing prohibited during closed periods of commercial seasons in Lower Yukon Area.
- Summer season subsistence/commercial fishing in the Lower Yukon Area is reduced to 3 days per week during the commercial Chinook and summer chum salmon season.

1974-77

- Legalized sale of salmon roe from Yukon Area subsistence caught salmon.

1976

- Limited entry begins for Yukon River commercial fisheries.
- Streams crossing the Dalton Highway north of the Yukon River are closed to subsistence fishing.

1977

- Summer season subsistence/commercial fishing in the Lower Yukon Area is reduced to 2.5 days per week during the commercial Chinook and summer chum salmon season.
- Fall season subsistence/commercial fishing in the Lower Yukon Area is reduced to 3 days per week during the fall chum salmon season.

1978

- Passage of the *State of Alaska Subsistence Act*, which provides a rural subsistence priority in times of shortage.
- Commercial salmon roe fishery begins in the Upper Yukon Area.

1979

- Lower Yukon Area is reduced to subsistence/commercial fishing 2 days per week during the fall chum salmon season.

1980

- ANILCA (*Alaska National Interest Lands Conservation Act*) provides for a rural subsistence priority on Federal lands.
- Upper Yukon Area is reduced to subsistence/commercial fishing 4 days per week (two 48-hour periods), except in the upper portion of District 5.

1980-89

- Unified management of subsistence fishing by the State of Alaska and the federal government, consistent with ANILCA and the *State of Alaska Subsistence Act*.

1981

- Summer season commercial fishing periods in the Lower Yukon Area established in-season by state emergency order (EO).

1982

- Tanana River Subdistrict 6-C Subsistence Management Plan established.

1983-84

- Lower Yukon Area special subsistence periods established inseason by EO.

1986

- Personal use fisheries created for Alaska residents living in non-rural areas. Non-rural residents are classified as “personal use” fishers rather than subsistence fishers regardless of where they fish.

1987

- Regulations for a personal use fall chum salmon fishery established in the Yukon Area.
- Regulatory *Yukon Area Fall Chum Salmon Management Plan* established.

1988

- Regulatory *Tanana River Salmon Management Plan* established.
- In Subdistricts 6-A, 6-B and 6-C subsistence and personal use periods are limited to two 42-hour periods per week.
- Subsistence permits required for entire Tanana drainage.
- In District 6, no more than one 42-hour commercial fishing period per week in the fall season.
- Regulations for personal use fisheries for all salmon species established in the Yukon Area.
- “Old Minto Area” is open to subsistence salmon fishing 5 days per week.
- Upper Tanana Area remains open to subsistence fishing 7 days per week.

1990

- Alaska Supreme Court case removes rural residency requirement for subsistence participation (*McDowell v. State*).
- Regulatory *Yukon River Summer Chum Salmon Management Plan* established.
- Lower Kantishna and Toklat rivers closed to subsistence and personal use fishing for fall chum salmon in order to rebuild Toklat River stock.
- Districts 5 and 6 commercial seasons established by EO.

1992

- Alaska divided into subsistence and non-subsistence areas. Personal use fishing only allowed within the non-subsistence areas. Fairbanks Nonsubsistence Area established.

1993

- Regulations implemented separating subsistence and commercial salmon fishing times in Districts 1-3 and Subdistrict 4-A. (Prior to 1993 subsistence and commercial periods coincided.)
 - In Districts 1-3 subsistence salmon fishing is open 24 hours per day until commercial season begins and after season ends. In summer season, subsistence fishing is closed 18 hours before, during, and 12 hours after each commercial period. In fall season, subsistence fishing is closed 12 hours before, during, and 12 hours after each commercial period. Additional periods for subsistence salmon fishing may be authorized.

- In Subdistricts 4-B, 4-C, 5-B and 5-C subsistence salmon fishing is open 7 days per week until commercial season begins, then commercial and subsistence periods coincide. Additional periods for subsistence salmon fishing may be authorized.
 - Koyukuk River, Kantishna River, and Subdistrict 5-D remain open to subsistence salmon fishing 7 days per week.
- State Superior Court case declares subsistence and non-subsistence areas are unconstitutional and subsistence salmon fishing is again allowed statewide (*State v. Kenaitze Indian Tribe*).
- Regulatory *Toklat River Fall Chum Salmon Rebuilding Management Plan* established.

1994

- Subdistrict 5-A subsistence salmon fishing is allowed 5 days per week once commercial season ends.
- Regulatory *Anvik River Chum Salmon Fishery Management Plan* established.

1995

- Alaska Supreme Court reverses decision in *Kenaitze* case, and Alaska is again divided into subsistence and non-subsistence areas. Personal use fishing is only allowed within the non-subsistence areas.
- Ninth Circuit Court finds that Federal jurisdiction for fisheries should be extended to navigable waters on Federal lands (*State of Alaska v. Babbitt a.k.a. Katie John decision*). Congressional moratoriums delay implementation until 1999.

1998

- Subdistrict 5-A subsistence salmon fishing is allowed 7 days per week once commercial season ends.
- Regulatory *Yukon River King Salmon Management Plan* established.

1999

- Subdistrict 5-A subsistence salmon fishing is returned to 5 days per week once commercial season ends because in 1998 Toklat River escapement goals were not met.
- Regulatory *Yukon River Coho Salmon Management Plan* established.

2000

- U.S. Fish and Wildlife Service begins first season of joint subsistence fisheries management authority with ADF&G in portions of the Yukon Area.

2001

- Windowed subsistence fishing schedule implemented throughout the entire Yukon River Area when there is no commercial fishing season:
 - Districts 1-3 are open to subsistence salmon fishing for two 36-hour periods per week.

- District 4 and Subdistricts 5-B and 5-C are open to subsistence salmon fishing for two 48-hour periods per week.
- Subdistricts 5-A, 6-A and 6-B (including the Kantishna River) are open to subsistence salmon fishing for two 42-hour periods per week.
- The "Old Minto Area" is open to subsistence salmon fishing 5 days per week, and the boundary is extended.
- The Coastal District, Koyukuk River and Subdistrict 5-D are open to subsistence salmon fishing 7 days per week.
- Subdistrict 6-C is open to personal use salmon fishing for two 42-hour periods per week.
- Amounts necessary for subsistence defined for Yukon Area:
 - Chinook salmon: 45,500 - 66,704 fish
 - Summer chum salmon: 83,500 - 142,192 fish
 - Fall chum salmon: 89,500 - 167,900 fish
 - Coho salmon: 20,500 - 51,980 fish

2002

- During times of conservation for one species in a mixed stock salmon fishery, dip net gear may be used to harvest other salmon or non-salmon species that are not of concern.
 - Subsistence fishermen in the Lower Yukon Area are no longer required to remove the dorsal fin from Chinook salmon when no commercial fishing is expected to occur.
-